

LIST OF OFFICERS

IN

THE SURVEY DEPARTMENTS

CORRECTED TO 1ST JANUARY 1885.



CALCUTTA:
PRINTED BY THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1885.

Classified List of the Officers of the Senior Department of

No. sanctioned.	No. existing in each grade.	Names of Officers and Branch to which originally posted.	Substantive Appointment.	Survey Party or Office to which at present attached.
ADMINISTRATIVE STAFF.				
1	1	Bt. Col. G. C. DePrée, s.c., P.C.H. [Topogl.]	Surv. Genl. of India	Calcutta
1	1	Bt. Lt.-Col. H. R. Thuillier, R.E., P.H. [G. T. S.]	Depty. Surv. Genl. Offg. in charge Rev. Survey Branch	Calcutta
1	1	Bt. Col. J. Sconce, s.c., P.H. [Rev.]	Depty. Surv. Genl. in charge Rev. Survey Branch	On furlough
		Bt.-Col. C. T. Haig, R.E. [G. T. S.]	Depty. Supdt., 1st grade	Dehra Dun
1	1	Major C. Strahan, R.E. [Topogl.]	Asst. Surv. Genl.	Calcutta
2	2	J. Waterhouse, s.c., P.H. [Topogl.]	Ditto	Do.
3	3	M. W. Rogers, R.E., L.S. [G. T. S.]	Ditto	Do.
SENIOR BRANCH.				
DEPUTY SUPERINTENDENTS.				
1ST GRADE.				
1	1	Bt. Col. C. T. Haig, R.E. [G. T. S.]	Depty. Supdt., 1st grade	Dehra Dun
2	2	Bt. Lt. Col. J. Herschel, R.E., F.R.S., P.H. [G. T. S.]	Ditto	On duty, Europe
3	3	Major G. Strahan, R.E., P.H. [Topogl.]	Ditto	On furlough
2ND GRADE.				
1	1	Major T. T. Carter, R.E., P.H. [G. T. S.]	Depty. Supdt., 2nd grade	On furlough
2	2	Bt.-Col. D. Macdonald, s.c., P.H. [Rev.]	Ditto	Do.
3	3	Lt.-Col. F. Coddington, s.c., P.H. [Rev.]	Ditto	In charge Ferozepore and Jullundur Districts Survey, Punjab, Simla, Head Quarters, Calcutta
4	4	Major C. Strahan, R.E. [Topogl.]	Ditto	On furlough
5	5	Lt.-Col. W. Barron, s.c., P.H. [Rev.]	Ditto	In charge Darjeeling and Nepal Boundary Parties, Mussoorie
6	6	Bt. Col. H. C. B. Tauner, B., s.c. [Rev.]	Ditto	In charge Nos. 1 and 2 Astronomical Parties, Poona
7	7	Major W. J. Heaviside, R.E., P.H. [G. T. S.]	Ditto	In charge Kattywar and Cutch Survey, Poona
8	8	Lt.-Col. A. Pullan, s.c., P.H. [G. T. S.]	Ditto	
3RD GRADE.				
1	1	Major D. C. Andrew, s.c., P.H. [Rev.]	Depty. Supdt., 3rd grade	In charge South Deccan Topogl. Survey, Bombay Presidency, Poona, Head Quarters, Calcutta
2	2	Lt.-Col. W. H. Wilkins, s.c., P.H. [Rev.]	Ditto	In charge Gorukpur District (Cadastral) Survey, N.-W. P., Naini Tal
3	3	Major J. E. Sandeman, s.c., P.H. [Rev.]	Ditto	In charge Guzerat Survey, Poona
4	4	Lt.-Col. W. F. Badgley, s.c., P.H. [Topogl.]	Ditto	Afghan Boundary Commission
5	5	Major T. H. Holdich, R.E., L.S. [Topogl.]	Ditto	Head Quarters, Calcutta
6	6	J. Waterhouse, s.c., P.H. [Topogl.]	Ditto	Ditto
7	7	M. W. Rogers, R.E., L.S. [G. T. S.]	Ditto	In charge Thana District, Topographical Survey, Konkan, Bombay Presidency, Poona
8	8	J. Hill, R.E. [G. T. S.]	Ditto	In charge Burma Topogl. Survey, Rangoon
9	9	Mr. H. Horst [Topogl.]	Ditto	In charge, Trigonometrical Branch Office, Dehra Dun
10	10	W. H. Cole, M.A., H.S. [G. T. S.]	Ditto	

the Survey of India as it stood on the 1st January 1885.

No. existing in each grade.	Consolidated Salary.	Extra allowances, if any.	REMARKS.
	R a. p.		
1	3,000 0 0		
1	2,200 0 0		
1	2,000 0 0		For 2 years from 14th March 1884.
1	1,600 0 0	(a) Presidency	Officiating Deputy Surveyor General, Officiating in charge Trigonometrical Survey Branch.
2	1,100 0 0	(b) Special local and (c) Inclusive of personal	Officiating Deputy Superintendent, 1st Grnd. in charge Engraving and Cartographic Offices, Head Quarters, Calcutta.
3	1,182 10 0	(a) Presidency	In charge Lithographic and Photographic Offices, Head Quarters, Calcutta.
			In charge Mathematical Instrument Office, and Correspondence Office, Head Quarters, Calcutta.
1	2,000 0 0		Officiating Deputy Surveyor General, Officiating in charge Trigonometrical Survey Branch.
2			
3			For 1 year, from 7th May 1884.
1			For 1 year, from 6th December 1884.
2			For 2 years, from 7th March 1884.
3	1,600 0 0		Officiating Deputy Superintendent, 1st grade.
4	1,600 0 0	(a) Presidency	Officiating Deputy Superintendent, 1st Grade Assistant Surveyor General.
5			For 2 years, from 0th November 1883.
6	1,300 0 0		
7	1,482 10 0		
8	1,300 0 0		
1	1,300 0 0		Officiating Deputy Superintendent, 2nd grade.
2	1,300 0 0	(a) Presidency	Ditto ditto.
3	1,300 0 0		Ditto ditto.
4	1,300 0 0		Ditto ditto.
5	1,482 10 0		Ditto ditto.
6	1,100 0 0	(b) Special local allowance and (c) Inclusive of personal.	Assistant Surveyor General.
7	1,182 10 0	(a) Presidency	Ditto ditto.
8	1,182 10 0		
9	1,000 0 0	(d) Burma.	
10	1,000 0 0		

(a) Department of Agriculture, Revenue and Commerce Memorandum No. 213, dated 14th May 1878.
 (b) Department of Agriculture and Commerce Memorandum No. 731, dated 31st October 1873.
 (c) Department of Revenue and Agriculture, No. 3938, dated 15th September 1883.
 (d) Revenue and Agricultural Department, No. 171, dated 6th May 1880.

Classified List of the Officers of the Senior Department of the

No. sanctioned.	No. existing in each grade.	Names of Officers and Branch to which originally posted.	Substantive Appointment.	Survey Party or Office to which at present attached.
SENIOR BRANCH—concl'd.				
DEPUTY SUPERINTENDENTS—concl'd.				
4TH GRADE.				
11	1	Mr. H. B. Talbot, L.S. [Rev.]	Depty. Supdt., 4th grade	In charge Akyab District [Cadastral] Survey British Burma, Akyab.
	2	Major A. W. Baird, B.E., P.H. A.I.C.E. [G. T. S.]	Ditto	In charge Tidal and Leveling operations, India, Burma, Ceylon, &c., Poona.
	3	„ J. R. McCullagh, B.E., L.S. . [G. T. S.]	Ditto	In charge Mysore Topogl. Survey, Bangalore
	4	„ J. R. Wilmer, s.c., H.S. . [Topogl.]	Ditto	In charge Mirzapur Topogl. Survey, Mussoorie.
	5	Mr. J. McGill [G. T. S.]	Ditto	On furlough
	6	Major S. H. Cowan, s.c., P.H. . [Rev.]	Ditto	In charge Basti District [Cadastral] Survey, N.-W. P., Naini Tal.
	7	„ E. H. Steel, s.c., H.S. . . [Rev.]	Ditto	In charge Ajmere-Alhairwara Districts Survey, Rajpootna, and superintending detached parties working in N.-W. P. and Central Provinces, Mussoorie.
	8	„ H. S. Hutchinson, s.c., P.H. [Rev.]	Ditto	In charge Henzada District [Cadastral] Survey, British Burma, Rangoon.
	9	Mr. E. C. Barrett, H.S. . . . [Rev.]	Ditto	In charge Kamrup District [Cadastral] Survey, Assam, Shillong.
	10	Major R. Beavan, s.c., P.H. . [Rev.]	Ditto	In charge Central India and Rajputana Topogl. Survey, Mussoorie.
	11	Bt. Lt.-Col. R. G. Woodthorpe, B.E., L.S. [Topogl.]	Ditto	In charge North-East Frontier Topogl. Survey, Shillong.
ASSISTANT SUPERINTENDENTS.				
1ST GRADE.				
11	1	Mr. G. H. Cooke, L.S. [Rev.]	Asst Supdt., 1st grade	Head Quarters, Calcutta
	2	„ E. J. Jackson, H.S. . . . [Rev.]	Ditto	In charge Shunyghen District Survey, British Burma, Rangoon.
	3	Captain St. G. C. Gore, B.E. . . [G. T. S.]	Ditto	Afghan Boundary Commission
	4	„ J. R. Hobday, s.c., H.S. . [Topogl.]	Ditto	In charge Andaman Topographical Survey, Mussoorie.
	5	Mr. E. C. Ryall [G. T. S.]	Ditto	Durjeeling and Nepal Boundary Parties, Mussoorie.
	6	Lieut. the Hon'ble M. G. Talbot, B.E., H.S. *	Ditto	Afghan Boundary Commission
	7	„ F. B. Longe, B.E. *	Ditto	Gorukpur District [Cadastral] Survey, N.-W. P., Naini Tal.
	8	„ R. A. Wahab, B.E., H.S. . . *	Ditto	In charge Baluchistan Topographical Survey, Mussoorie.
	9	Mr. W. H. Patterson, L.S. . . [Rev.]	Ditto	In charge Bhopal and Malwa Topographical Survey, Poona.
	10	„ F. W. Kelly, H.S. . . . [Rev.]	Ditto	Akyab District [Cadastral] Survey, British Burma, Akyab.
	11	Lieut. H. M. Jackson, B.E., H.S. . *	Ditto	Mysore Topogl. Survey, Bangalore
2ND GRADE.				
6	1	Lieut. W. H. Pollen, B.E., L.S. . *	Asst. Supdt., 2nd grade	Central India and Rajputana Topographical Survey, Mussoorie.
	2	„ G. B. Hodgson, s.c., H.S. . *	Ditto	Guzerat Survey, Poona
	3	„ S. G. Burrard, B.E. . . . *	Ditto	Trigl. Branch Office, Dehra Dun
	4	Mr. A. D'Souza [G. T. S.]	Ditto	In charge Secondary Triangulation Party
	5	„ G. B. Scott, H.S. . . . [Rev.]	Ditto	Baluchistan Topogl. Survey, Mussoorie.
	6	Vacant		

* Joined the Department after the amalgamation on the 1st January 1876.

Survey of India as it stood on the 1st January 1885—concluded.

No. existing in each grade.	Consolidated Salary.	Extra allowances, if any.	REMARKS.
	<i>R a. p.</i>		
1	1,000 0 0	(a) Burma	Officiating Deputy Superintendent, 3rd grade.
2	1,182 10 0	(b) Deputation	Ditto ditto.
3	1,182 10 0	. . . . .	Ditto ditto.
4	1,100 0 0	(c) Inclusive of personal	Ditto ditto.
5			For 1 year 11 months and 16 days, from 7th November 1883.
6	1,100 0 0	(c) Inclusive of personal	Officiating Deputy Superintendent, 3rd Grade.
7	950 0 0	(c) Inclusive of personal.	
8	950 0 0	(a) Burma and (c) Inclusive of personal.	
9	850 0 0		
10	950 0 0	(c) Inclusive of personal.	
11	990 0 0		
1	850 0 0		Officiating Deputy Superintendent, 4th grade.
2	850 0 0	(a) Burma	Ditto ditto.
3	990 0 0	. . . . .	Ditto ditto.
4	850 0 0	. . . . .	Ditto ditto.
5	600 0 0	. . . . .	Ditto ditto.
6	920 0 0	. . . . .	Ditto ditto.
7	920 0 0	. . . . .	Ditto ditto.
8	670 0 0	(d) Baluchistan. (e) Charge.	
9	600 0 0	(e) Charge.	
10	600 0 0	(a) Burma.	
11	670 0 0		
1	670 0 0		Officiating Assistant Superintendent, 1st grade.
2	600 0 0		Ditto ditto.
3	670 0 0		Ditto ditto.
4	600 0 0	(e) Charge	Ditto ditto.
5	600 0 0	. . . . .	Ditto ditto.
6			

(a) Department of Finance and Commerce, No. 256, dated 15th April 1882.
 (b) Revenue and Agricultural Department, No. 2118, dated 8th January 1884.
 (c) Department of Revenue and Agriculture, No. 3038, dated 15th September 1882.
 (d) Revenue and Agricultural Department No. 5223, dated 15th December 1882.
 (e) Department of Agriculture, Revenue and Commerce, Memorandum No. 731, dated 31st October 1873.

Classified List of the Officers of the Junior or Subordinate Department of the Survey of India as it stood on the 1st January 1885.

No. sanctioned.	No. existing in each grade.	Names of Officers and Branch to which originally posted.	Substantive Appointment.	Survey Party or Office to which at present attached.
JUNIOR BRANCH.				
SURVEYORS.				
1ST GRADE.				
<i>Salary ₹500.</i>				
8	1	Mr. J. Peyton [G. T. S.]	Surveyor, 1st grade	Darjeeling Survey
		„ G. A. McGill, L.S. [Topogl.]	Ditto	Chief Draftsman, Head Quarters, Calcutta
	2	„ D. Atkinson [Topogl.]	Ditto	Trigonometrical Branch Office, Dehra Dun
	3	„ F. Grant [Rev.]	Ditto	Shuaygheen Districts—[Cadastral] Survey, British Burma
	4	„ C. Wood, L.S. [G. T. S.]	Ditto	Trigonometrical Branch Office, Dehra Dun
	5	„ H. E. T. Keelan [G. T. S.]	Ditto	Tidaland Leveling Operations, India, Burma, Ceylon, &c.
	6	„ P. A. G. Cowley, L.S. [Rev.]	Ditto	In charge Chhattisgarh Division [Cadastral] Survey, Central Provinces
	7	„ A. J. Wilson, L.S. [Topogl.]	Ditto	Central India and Rajputana Topogl. Survey
	8	Vacant, J. A. May		
2ND GRADE.				
<i>Salary ₹400.</i>				
10	1	Mr. L. H. Clarke [G. T. S.]	Surveyor, 2nd grade	Trigonometrical Branch Office, Dehra Dun
	2	„ W. Todd [G. T. S.]	Ditto	On duty at Head Quarters, Calcutta
	3	„ G. W. E. Atkinson [G. T. S.]	Ditto	Trigonometrical Branch Office, Dehra Dun
	4	„ J. A. May [Topogl.]	Ditto	Bhopal and Malwa Topogl. Survey
	5	„ James Todd [Rev.]	Ditto	Ferozepur and Jullundur Districts Survey, Punjab
		„ S. M. Smylie, L.S. [Rev.]	Ditto	Head Draftsman, Head Quarters, Calcutta
	6	„ J. S. Pemberton, L.S. [Rev.]	Ditto	Basti District [Cadastral] Survey, N.-W. P.
	7	„ H. R. Littlewood [Rev.]	Ditto	Henzada Districts [Cadastral] Survey, British Burma
	8	„ W. A. Wilson, L.S. [Rev.]	Ditto	In charge Dehra Dun District [Cadastral] Survey, N.-W. P.
	9	„ A. M. Lawson, L.S. [Rev.]	Ditto	Thana District Topogl. Survey, Konkan, Bombay Presidency
	10	„ F. Adams [Topogl.]	Ditto	On duty at Head Quarters, Calcutta
3RD GRADE.				
<i>Salary ₹350.</i>				
14	1	Mr. A. D. Smart [Rev.]	Surveyor, 3rd grade	In charge Raipur Instruction Party, Central Provinces
	2	„ W. S. Buttress [Rev.]	Ditto	Ferozepore and Jullundur Districts Survey, Punjab
		„ E. S. P. Atkinson [Topogl.]	Ditto	Mysore Topogl. Survey; temporarily detached under Settlement Officer, Rawal Pindi, Punjab
	3	„ A. J. Gibson [Rev.]	Ditto	Ajmere-Mhairwara Districts Survey, Rajputana
	4	„ M. J. Ogle [Topogl.]	Ditto	North-East Frontier Topogl. Survey
	5	„ W. R. Vyall [Rev.]	Ditto	On furlough
	6	„ A. G. Wyatt [Topogl.]	Ditto	On duty at Head Quarters, Calcutta
	7	„ H. W. Psychers [G. T. S.]	Ditto	Trigonometrical Branch Office, Dehra Dun

ment of the Survey of India as it stood on the 1st January 1885.

No. existing in each grade.	Consolidated Salary.	Extra allowances, if any.	REMARKS.
	<i>R a. p.</i>		
1	500 0 0	(a) Full scale, local.	
2	600 0 0		
3	500 0 0	(b) Burma.	
4	500 0 0	(c) Dehra Office.	
5	500 0 0		
6	500 0 0	(e) Charge.	
7	500 0 0		
8			
1	400 0 0		Doing duty as Solar Photographer.
2	400 0 0	(a) Presidency house-rent.	
3	400 0 0	(c) Dehra Office.	
4	400 0 0		
5	400 0 0		
	450 0 0		
6	400 0 0		
7	400 0 0	(b) Burma.	
8	400 0 0	(f) Charge.	
9	400 0 0		
10	400 0 0	(a) Presidency house-rent.	
1	350 0 0	(g) Charge	Rejoined from half pay 11st 26th October 1884.
2	350 0 0		
	350 0 0		
3	350 0 0		
4	350 0 0	(h) Assam.	
5			For 2 years, from 1st August 1883.
6	350 0 0	(a) Presidency house-rent.	
7	350 0 0	(c) Dehra Office.	

(a) Financial Resolution No. 704, dated 22nd February 1886.
 (b) Home, Revenue, and Agricultural Department, No. 171, dated 6th May 1880.
 (c) Financial Resolution No. 3060, dated 22nd December 1884, and No. 2619, dated 30th November 1871.
 (d) Revenue and Agricultural Department, No. 77, dated 23rd August 1881.
 (e) Revenue and Agricultural Department No. 8028, dated 11th July 1884.
 (f) Revenue and Agricultural Department, No. 488, dated 30th October 1893.
 (g) Surveyor General's No. 2109 S., dated 17th December 1884.
 (h) Financial Resolution No. 3202, dated 31st October 1889.

Classified List of the Officers of the Junior or Subordinate Department

No. sanctioned.	No. existing in each grade.	Names of Officers and Branch to which originally posted.	Substantive Appointment.	Survey Party or Office to which at present attached.
JUNIOR BRANCH—contd.				
SURVEYORS—concl'd.				
3RD GRADE—contd.				
Salary Rs350—contd.				
8		Mr. G. Belcham, H.S. [G. T. S.]	Surveyor, 3rd grade	Tidal and Leveling Operations, India, Burma, Ceylon, &c.
9		„ H. Downman [Rev.]	Ditto	Shuaygheen District Survey, British Burma
10		„ E. G. Little [Rev.]	Ditto	Gorukpur District [Cadastral] Survey, N.-W. P.
11		„ H. T. Hanby, L.S. [Rev.]	Ditto	Basti District [Cadastral] Survey, N.-W. P.
12		„ L. J. Pocock, H.S. [G. T. S.]	Ditto	Mysore Topogl. Survey
13		„ A. Christie, H.S. [G. T. S.]	Ditto	Guzerat Survey
14		„ W. J. O'Sullivan [G. T. S.]	Ditto	Darjeeling Survey
4TH GRADE.				
Salary Rs300.				
1		Mr. N. C. Gwynne [G. T. S.]	Surveyor, 4th grade	Kattywar and Cutch Survey
2		„ W. C. Price [G. T. S.]	Ditto	Basti District [Cadastral] Survey, N.-W. P.
3		„ C. H. McA'Fee, L.S. [G. T. S.]	Ditto	Guzerat Survey
4		„ C. F. Hamer [Topogl.]	Ditto	Mirzapur Topogl. Survey
5		„ J. H. O'Donel [Rev.]	Ditto	Kamrup District [Cadastral] Survey, Assam
6		„ T. E. M. Claudius [Topogl.]	Ditto	Baluchistan Topogl. Survey
7		„ A. J. James [Topogl.]	Ditto	Mysore Topogl. Survey
8		„ T. H. Rendell [G. T. S.]	Ditto	Tidal and Leveling Operations, India, Burma, Ceylon, &c.
9		„ W. W. MoNair, L.S. [Topogl.]	Ditto	Trigl. Branch Office, Dehra Dun
10		„ J. T. U. Cozen [Rev.]	Ditto	South Deccan Topogl. Survey, Bombay Presidency.
11		„ D. A. King [Rev.]	Ditto	Kamrup District [Cadastral] Survey, Assam
12		„ W. Stotesbury, H.S., L.S., Canarese [Topogl.]	Ditto	Draftsman, Head Quarters, Caloutta
13		„ R. B. Smart, L.S. [Rev.]	Ditto	Henzada District [Cadastral] Survey, British Burma.
14		„ F. Kitchen [Topogl.]	Ditto	Mysore Topogl. Survey
15		„ Hugh Todd [G. T. S.]	Ditto	Ditto
16		„ E. J. Connor, L.S. [G. T. S.]	Ditto	Tidal and Leveling Operations, India, Burma, Ceylon, &c.
17		„ J. Connor [Rev.]	Ditto	Kamrup District [Cadastral] Survey, Assam
18		„ T. H. Dunne, L.S. [Rev.]	Ditto	Henzada District [Cadastral] Survey, British Burma.
18		„ J. Bond [G. T. S.]	Ditto	Trigonometrical Branch Office, Dehra Dun

of the Survey of India as it stood on the 1st January 1885—continued.

No. existing in each grade.	Consolidated Salary.	Extra allowances, if any.	REMARKS.
	<i>R a. p.</i>		
8	350 0 0		
9	350 0 0	(a) Burma.	
10	350 0 0		
11	350 0 0		
12	350 0 0		
13	350 0 0		
14	350 0 0	(b) Full scale local.	
1	300 0 0		
2	300 0 0		
3	300 0 0		
4	300 0 0		
5	300 0 0	(c) Assam.	
6	300 0 0	(d) Baluchistan.	
7	300 0 0		
8	300 0 0	(e) Deputation.	
9	300 0 0		
10	300 0 0		
11	300 0 0	(c) Assam.	
12	350 0 0		
13	300 0 0	(a) Burma.	
14	300 0 0		
15	300 0 0		
16	300 0 0	(c) Assam.	
17	300 0 0	(a) Burma.	
18	300 0 0	(f) Dehra Office.	

(a) Home, Revenue and Agricultural Department, No. 171, dated 6th May 1880.
 (b) Financial Resolution No. 704, dated 22nd February 1880.
 (c) Revenue and Agricultural Department No. 276, dated 18th January 1884.
 (d) Revenue and Agricultural Department No. 6282, dated 16th December 1882.
 (e) Home, Revenue and Agricultural Department, No. 482, dated 30th October 1879.
 (f) Financial Resolution No. 8960, dated 22nd December 1884, and No. 2579, dated 30th November 1871.

Classified List of the Officers of the Junior or Subordinate Department

No. sanctioned.	No. existing in each grade.	Names of Officers and Branch to which originally posted.	Substantive Appointment.	Survey Party or Office to which at present attached.
		JUNIOR BRANCH—contd.		
		ASSISTANT SURVEYORS.		
		1st GRADE.		
		<i>Salary ₹200, rising to ₹250.</i>		
41	1	Mr. C. D. Potter, L.S. . . . [G. T. S.]	Asst. Surveyor, 1st grade	Secondary Triangulation Party
	2	" J. Newland, L.S. . . . [Rev.]	Ditto	Thana District Topogl. Survey, Konkan, Bombay Presidency.
	3	" C. Tapsell, L.S. <i>off. d. inv.</i> [Topogl.]	Ditto	Guzerat Survey
	4	" J. A. Barker . . . [Topogl.]	Ditto	Mysore Topogl. Survey
	5	" E. A. Wainright . . . [Topogl.]	Ditto	Mirzapur Topogl. Survey
		" R. C. D. Ewing, H.S. . . . [Rev.]	Ditto	Draftsman, Head Quarters, Calcutta
	6	" W. J. Cornelius, L.S. . . [Topogl.]	Ditto	Central India and Rajputana Topogl. Survey
	7	" G. W. Jarbo, L.S. . . . [Rev.]	Ditto	Akyab District [Cadastral] Survey, British Burma.
		" P. J. W. Doran, L.S. . . [Topogl.]	Ditto	Draftsman, Head Quarters, Calcutta
	8	" J. R. Scott, L.S. . . . [Rev.]	Ditto	Akyab District [Cadastral] Survey, British Burma.
	9	" J. McHatton, L.S. . . . [Rev.]	Ditto	Shuangheon District Survey, British Burma.
	10	" H. T. Kitchen . . . [Topogl.]	Ditto	Mirzapur Topogl. Survey
	11	" J. H. Wilson, L.S. . . [Topogl.]	Ditto	Burma Topogl. Survey, British Burma
	12	" J. Hickie, L.S. . . . [G. T. S.]	Ditto	South Deccan Topogl. Survey, Poona
	13	" W. A. Fielding, L.S. . . [G. T. S.]	Ditto	Kattywar and Cutch Survey
	14	" S. O. Madras . . . [Rev.]	Ditto	On duty at Head Quarters, Calcutta
	15	" G. D. Cusson, L.S. . . [G. T. S.]	Ditto	Andaman Topogl. Survey
	16	" T. F. Freeman, L.S. . . [Rev.]	Ditto	Gorakpur District [Cadastral] Survey, N.-W. P.
	17	" G. C. Swiney . . . [Rev.]	Ditto	Chhatisgarh Division [Cadastral] Survey, C. P.
	18	" W. H. Lilley . . . [Topogl.]	Ditto	Mirzapur Topogl. Survey
	19	" J. S. Swiney . . . [Rev.]	Ditto	Akyab District [Cadastral] Survey, British Burma.
	20	" C. P. Torrens . . . [G. T. S.]	Ditto	Burma Topogl. Survey, Rangoon
	21	" W. Robert . . . [Topogl.]	Ditto	Darjeeling Survey
	22	" T. Shaw, L.S. . . . [Rev.]	Ditto	Gorakpur District [Cadastral] Survey, N.-W. P.
	23	" C. W. Wilson, L.S. . . [Rev.]	Ditto	Ferozepur and Jullundur Districts Survey, Punjab.
	24	" E. J. Martin . . . [Rev.]	Ditto	On duty at Head Quarters, Calcutta
	25	" C. W. F. Seyers . . . [Rev.]	Ditto	Ajmere-Mhairwara Districts Survey, Rajputana.
	26	" W. H. Penrose, L.S. . . [Rev.]	Ditto	Burma Topogl. Survey
	27	" G. E. Parker . . . [Rev.]	Ditto	Shuangheon District Survey, British Burma.
	28	" G. Campbell . . . [Rev.]	Ditto	Ferozepur and Jullundur Districts Survey, Punjab.
	29	" W. C. G. Barkley . . [Topogl.]	Ditto	Darjeeling Survey
	30	" G. T. Hall, L.S. . . . [G. T. S.]	Ditto	Kattywar and Cutch Survey
	31	" G. Vander Beck, L.S. . [Topogl.]	Ditto	Bhopal and Malwa Topogl. Survey
	32	" R. Todd . . . [Topogl.]	Ditto	Mysore Topogl. Survey
	33	" J. Murphy . . . [Rev.]	Ditto	Gorakpur District [Cadastral] Survey, N.-W. P.
	34	" R. A. Gibson . . . [Topogl.]	Ditto	Burma Topogl. Survey, Rangoon

of the Survey of India as it stood on the 1st January 1896—continued.

No. existing in each grade.	Consolidated Salary.	Extra allowances, if any.	REMARKS.
	<i>R a. p.</i>		
1	300 0 0		Offg. Surveyor, 4th grade.
2	250 0 0	(a) Half scale, local.	
3	250 0 0	(a) Half scale, local.	
4	250 0 0		
5	250 0 0		
	325 0 0		
6	250 0 0		
7	250 0 0	(b) Burma.	
	300 0 0		
8	250 0 0	(b) Burma.	
9	250 0 0	(b) Ditto.	
10	250 0 0		
11	250 0 0	(b) Burma.	
12	250 0 0	(a) Half scale, local.	
13	250 0 0	(a) Ditto ditto.	
14	250 0 0	(a) Presidency house-rent.	
15	250 0 0		
16	250 0 0		
17	250 0 0		
18	250 0 0		
19	250 0 0	(b) Burma.	
20	250 0 0	(b) Ditto.	
21	250 0 0	(a) Full scale, local.	
22	250 0 0		
23	250 0 0		
24	250 0 0	(a) Presidency house-rent.	
25	230 0 0		
26	220 0 0	(b) Burma.	
27	210 0 0	(b) Ditto.	
28	210 0 0		
29	210 0 0	(a) Full scale, local.	
30	210 0 0	(a) Half scale, local.	
31	210 0 0	(a) Ditto ditto.	
32	250 0 0		
33	210 0 0		
34	210 0 0	(b) Burma.	

(a) Financial Resolution No. 704, dated 22nd February 1896.
(b) Home, Revenue and Agricultural Department No. 171, dated 6th May 1890.

Classified List of the Officers of the Junior or Subordinate Department

No. sanctioned.	No. existing in each grade.	Names of Officers and Branch to which originally posted.	Substantive Appointment.	Survey Party or Office to which at present attached.
JUNIOR BRANCH—contd.				
ASSISTANT SURVEYORS—contd.				
1st GRADE—concl'd.				
<i>Salary ₹200, rising to ₹250—concl'd.</i>				
35		Mr. A. W. Smart . . . [Rev.]	Asst. Surveyor, 1st grade	Alkyab District [Cadastral] Survey, British Burma.
36		„ W. M. Kelly, L.S. . . [Rev.]	Ditto	Thana District Topogl. Survey, Konkan, Bombay Presidency.
37		„ A. Kitchen . . . [Topogl.]	Ditto	Baluchistan Topogl. Survey . . .
38		„ E. P. S. Hill, H.S., L.S., Persian . [Rev.]	Ditto	Basti District [Cadastral] Survey, N.-W. P.
39		„ R. R. Dickinson, L.S. . . [Rev.]	Ditto	Thana District Topogl. Survey, Konkan, Bombay Presidency.
40		„ P. White, L.S. . . [Topogl.]	Ditto	South Deccan Topogl. Survey, Bombay Presidency.
41		Vacant.		
22 2ND GRADE.				
<i>Salary ₹160, rising to ₹200.</i>				
1		Mr. B. M. Wilson . . . [Rev.]	Asst. Surveyor, 2nd grade	On duty at Head Quarters, Calcutta .
2		„ E. Graham, L.S. . . [Topogl.]	Ditto	Burma Topogl. Survey, British Burma .
3		„ H. Corkery, L.S. . . [G. T. S.]	Ditto	On extraordinary leave
4		„ G. A. Knight <i>promoted March</i> [Topogl.]	Ditto	South Deccan Topogl. Survey, Bombay Presidency.
5		„ D. J. Collins . . . [G. T. S.]	Ditto	On furlough.
6		„ P. A. Peters, L.S. . . [Rev.]	Ditto	Shuaygheen District Survey, British Burma
7		„ P. F. Prunty . . . [G. T. S.]	Ditto	No. 1, Astronomical Party
8		„ J. Keating . . . [G. T. S.]	Ditto	Andaman Topogl. Survey
9		„ C. S. Kraal, L.S. . . [Rev.]	Ditto	Kamrup District [Cadastral] Survey, Assam
10		„ S. F. Norman . . . [G. T. S.]	Ditto	Guzerat Survey
11		„ C. Norman, L.S. . . [G. T. S.]	Ditto	Ditto
12		„ D. Campbell . . . [Topogl.]	Ditto	Andaman Topogl. Survey
13		„ L. F. Berkeley, L.S. . . [Rev.]	Ditto	Basti District [Cadastral] Survey, N.-W. P.
14		„ G. P. Tate, L.S. . . *	Ditto	Central India and Rajputana [Topogl.] Survey
15		„ J. M. Kennedy . . . [G. T. S.]	Ditto	Mysore Topogl. Survey
16		„ P. C. H. Smart . . . *	Ditto	Map Curator, Head Quarters, Calcutta .
17		„ C. George . . . *	Ditto	Bhopal and Malwa Topogl. Survey . . .
18		„ R. F. Warwick, L.S. . . [G. T. S.]	Ditto	Mirzapur Topogl. Survey
19		„ E. B. M. Drew . . . [Rev.]	Ditto	Ferozpur and Jullundur Districts Survey, Punjab.
20		„ J. C. Kelly, L.S. . . *	Ditto	Kamrup District [Cadastral] Survey, Assam
21		„ A. George . . . *	Ditto	Guzerat Survey
22		„ R. W. Senior, L.S. . . *	Ditto	Darjeeling Survey
23		„ W. H. D. Ewing . . . *	Ditto	Henzada District [Cadastral] Survey, British Burma.

* Joined the Department after the amalgamation on 1st January 1876.

of the Survey of India as it stood on the 1st January 1885—continued.

No. existing in each grade.	Consolidated Salary.	Extra allowances, if any.	REMARKS.
	<i>R a. p.</i>		
35	210 0 0	(a) Burma.	
36	210 0 0	(b) Half scale, local.	
37	210 0 0	(c) Baluchistan.	
38	200 0 0		
39	200 0 0	(b) Half scale, local.	
40	200 0 0		Rejoined from half-pay list on 1st September 1880.
41			
1	184 0 0	(b) Presidency house-rent.	
2	200 0 0	(a) Burma.	
3			For 6 months. On sick leave for 1 year, from 12th April 1882; extension for 6 months. Further extension for 6 months. Further extension for 6 months.
4	176 0 0	(b) Half scale, local.	
5			For 1 year from 1st October 1884.
6	168 0 0	(a) Burma.	
7	168 0 0		
8	168 0 0		
9	168 0 0	(d) Assam.	
10	168 0 0	(b) Half scale, local.	
11	168 0 0	(b) Ditto.	
12	168 0 0		
13	168 0 0		
14	160 0 0		
15	168 0 0		
16	220 0 0		
17	168 0 0	(b) Half scale, local.	
18	160 0 0		Rejoined from half-pay list on 1st April 1881.
19	160 0 0	(d) Assam.	
20	160 0 0	(b) Half scale, local.	
21	160 0 0		
22	160 0 0	(a) Burma.	

(a) Home, Revenue, and Agricultural Department, No. 171, dated 6th May 1880.
 (b) Financial Resolution No. 704, dated 22nd February 1880.
 (c) Revenue and Agricultural Department, No. 522 B, dated 15th December 1880.
 (d) Revenue and Agricultural Department, No. 278, dated 18th January 1884.

Classified List of Officers of the Junior or Subordinate Department

No. sanctioned.	No. existing in each grade.	Names of Officers and Branch to which originally posted.	Substantive Appointment.	Survey Party or Office to which at present attached.
22		JUNIOR BRANCH—concl. ASSISTANT SURVEYORS—concl. 3RD GRADE Salary R120, rising to R160		
1		Mr. J. A. Higgs	Assistant Surveyor, 3rd grade	Bhopal and Malwa Topographical Survey
2		" O. D. Smart <i>promoted to 1st grade</i>	Ditto	Gorukpur District [Cadastral] Survey, N.-W. P.
3		" A. Ewing	Ditto	North-East Frontier Topog. Survey
4		" M. Gastaud	Ditto	Central India and Rajputana Topog. Survey
5		" P. Beechey	Ditto	Ditto ditto.
6		" G. S. Willis	Ditto	Akyab District [Cadastral] Survey, British Burma.
7		" E. F. Berkeley	Ditto	Chhattisgarh Division [Cadastral] Survey, C. P.
8		" B. R. Hughes	Ditto	Basti District [Cadastral] Survey, N.-W. P.
9		" F. W. Moore	Ditto	Ajmere-Mhairwara Districts Survey, Rajasthan.
10		" J. P. Barker	Ditto	Ferozepur and Jullundur Districts Survey, Punjab.
11		" N. Bedford	Ditto	Gorukpore Dist. [Cadastral] Survey, N.-W. P.
12		" T. W. Babonau, (Jr.), L.S.	Ditto	Ajmere-Mhairwara Districts Survey, Rajasthan.
13		" T. J. J. Mills	Ditto	Mysore Topographical Survey
14		" H. A. Charrier, L.S.	Ditto	Kattywar and Cutch Survey
15		" P. J. Serrao	Ditto	Guzerat Survey
16		" J. Smith	Ditto	Kamrup District [Cadastral] Survey, Assam.
17		" W. E. Johnson	Ditto	Basti District [Cadastral] Survey, N. W.-P.
18		" C. G. S. Wood	Ditto	Trigl. Branch Office, Dehra Dun
19		" W. V. Skilling	Ditto	Ditto Ditto
20		" F. E. Warde	Ditto	Dehra Dun District [Cadastral] Survey, N.-W. P.
21		Vacant		
22		Ditto		

* Joined the Department after the amalgamation on 1st January 1878.

of the Survey of India as it stood on the 1st January 1885—concluded.

No. existing in each grade.	Consolidated Salary.	Extra allowances, if any.	REMARKS.
	R a. p.		
1	136 0 0		
2	136 0 0		
3	136 0 0	(a) Assam.	
4	128 0 0		
5	128 0 0		
6	128 0 0	(b) Burma.	
7	128 0 0		
8	128 0 0		
9	128 0 0		
10	128 0 0		
11	120 0 0		
12	120 0 0		
13	120 0 0		
14	120 0 0		
15	120 0 0		
16	120 0 0	(c) Assam.	
17	120 0 0		
18	120 0 0		
19	120 0 0		
20	120 0 0		
21	.		
22	.		

(a) Home, Revenue and Agricultural Department No. 3282, dated 31st October 1868.
 (b) Home, Revenue and Agricultural Department No. 171, dated 6th May 1860.
 (c) Revenue and Agricultural Department, No. 278, dated 18th January 1884.

General Alphabetical List of the Officers of the Senior Department

1	2	3	4	5	6	7
Number.	Names of Officers and Branch to which originally posted.	Passed in Vernacular.	Age.	Rank.	Grade.	Salary.
			Y. M. D.			R a. P.
1	Andrew, Major D. C., s.c. [Rev.]	P. H.	43 9 13	Deputy Superintendent	3rd grade	1,300 0 0
2	Badgley, Lieut.-Col. W. F., s.c. [Topogl.]	P. H.	47 1 21	Ditto	Ditto	1,300 0 0
3	Baird, Major A.W., B.E., A.I.C.E. [G. T. S.]	P. H.	42 2 5	Ditto	4th grade	1,182 10 0
4	Barrett, Mr. E. C. [Rev.]	H. S.	41 8 16	Ditto	Ditto	850 0 0
5	Barron, Lieut.-Col. W., s.c. [Rev.]	P. H.	46 11 15	Ditto	2nd grade	...
6	Beavan, Major R., s.c. [Rev.]	P. H.	41 3 11	Ditto	4th grade	950 0 0
7	Burrard, Lieut. S. G., B.E., *	L. S.	25 4 19	Assistant Superintendent	2nd grade	670 0 0
8	Carter, Major T. T., B.E. [G. T. S.]	P. H.	46 10 22	Deputy Superintendent	{ 2nd grade† 2nd grade	...
9	Coddington, Lieut.-Col. F., s.c. [Rev.]	P. H.	46 7 10	Ditto	Ditto	1,600 0 0
10	Cole, Mr. W. H., M.A. [G. T. S.]	H. S.	47 0 16	Ditto	3rd grade	1,000 0 0
11	Cooke, Mr. G. H. [Rev.]	L. S.	40 1 1	Assistant Superintendent	1st grade	850 0 0
12	Cowan, Major S. H., s.c. [Rev.]	P. H.	43 3 16	Deputy Superintendent	4th grade	1,100 0 0
13	DePrée, Bt. Col. G. C., s.c. [Topogl.]	P. C. H.	52 4 28	Surveyor General of India		3,000 0 0
14	D'Souza, Mr. A. [G. T. S.]	Not passed	47 4 17	Assistant Superintendent	2nd grade	600 0 0
15	Gore, Capt. St. G. C., B.E. [G. T. S.]	Not passed	35 10 8	Ditto	1st grade	990 0 0
16	Haig, Bt. Colonel C. T., B.E. [G. T. S.]	Ditto	50 2 20	Deputy Superintendent	Ditto	2,000 0 0
17	Heaviside, Major W. J., B.E. [G. T. S.]	P. H.	44 2 27	Ditto	2nd grade	1,482 10 0
18	Herschel, Bt. Lieut.-Col. J., B.E., F.R.S. [G. T. S.]	P. H.	47 2 1	Ditto	1st grade	...
19	Hill, Major J., B.E. [G. T. S.]	Not passed	44 0 7	Ditto	3rd grade	1,182 10 0
20	Hobday, Captain J. R., s.c. [Topogl.]	H. S.	34 5 16	Assistant Superintendent	1st grade	850 0 0
21	Hodgson, Lieut. G. B., s.c. *	H. S.	26 2 4	Ditto	2nd grade	600 0 0
22	Holdich, Major T. H., B.E. [Topogl.]	L. S.	41 10 16	Deputy Superintendent	3rd grade	1,482 10 0
23	Hörst, Mr. H. [Topogl.]	Not passed	50 7 27	Ditto	Ditto	1,000 0 0
24	Hutchinson, Major H. S., s.c. [Rev.]	P. H.	44 8 20	Ditto	4th grade	950 0 0
25	Jackson, Mr. E. J. [Rev.]	H. S.	41 0 0	Assistant Superintendent	1st grade	850 0 0
26	Jackson, Lieut. H. M., B.E. *	H. S.	26 9 5	Ditto	Ditto	670 0 0
27	Kelly, Mr. F. W. [Rev.]	H. S.	51 4 5	Ditto	Ditto	600 0 0
28	Longe, Lieut. F. B., B.E. *	Not passed	28 2 2	Ditto	Ditto	920 0 0

* Joined the Department after the amalgamation of 1st January 1878.
† Of the two grades here given the first was under the organization of 1866.

of the Survey of India as it stood on the 1st January 1885.

8	9	10	11	12	
Number.	Date of first appointment to Department.	Date of appointment to present grade.	* Period of service counting for pension on 1st Jan. 1885.	Present Post.	REMARKS.
			Y. M. D.		
1	Dec. 30, 1862	Jan. 1, 1878	. . .	In charge South Deccan Topographical Survey, Bombay Presidency, Poona.	Offg. Deputy Superintendent, 2nd grade.
2	May 3, 1865	Dec. 14, 1880	. . .	In charge Guzerat Survey, Poona	Ditto ditto
3	Dec. 4, 1868	July 1, 1882	. . .	In charge Tidal and Leveling Operations, India, Burma, Ceylon & Poona.	Offg. Deputy Superintendent, 3rd grade.
4	Dec. 30, 1868	Oct. 1, 1884	20 0 11	In charge Kamrup District [Cadastral] Survey, Assam, Shillong.	{ Furlough for 2 years, from 27th August 1869 to 12th July 1872. Joined the Junior Branch, 18th November 1862. Sick leave for 1 month from 20th June 1860.
5	June 27, 1862	Aug. 7, 1884	. . .	On furlough	For 2 years from 6th November 1863.
6	July 17, 1868	Nov. 10, 1884	. . .	In charge Central India and Rajputana Topographical Survey, Mussoorie.	
7	Sept. 2, 1884	Sept. 2, 1884	. . .	Trigl. Branch Office, Dehra Dun . . .	Offg. Assistant Superintendent, 1st grade.
8	{ Jan. 3, 1867a Mar. 1, 1862	{ Oct. 1, 1871 Jan. 1, 1873	. . .	On furlough	For 1 year from 6th December 1864.
9	Jan. 17, 1862	Oct. 27, 1878	. . .	In charge Ferozepur and Jullundur Districts Survey, Punjab, Simla.	Offg. Deputy Superintendent, 3rd grade.
10	{ Jan. 3, 1867a Sept. 1, 1867b	Nov. 28, 1884	16 11 29	In charge Trigonometrical Branch Office, Dehra Dun.	{ (a) Appointed on probation. Exclusive of service as Professor of Mathematics, Government College, Agra, from 14th April 1862 to end of February 1864. (b) Brought on the strength of the Department.
11	April 1, 1870	July 1, 1882	16 0 15	On duty Head Quarters, Calcutta . . .	Offg. Deputy Superintendent, 4th grade. Joined the Junior Branch, 6th Dec. 1866. Furlough for 2 years, from 22nd May 1869; extension for 12 days without pay.
12	Jan. 19, 1867	April 29, 1883	. . .	In charge Basti District [Cadastral] Survey, N.-W. P., Naini Tal.	Offg. Deputy Superintendent, 3rd grade.
13	Oct. 20, 1864	Jan. 12, 1884	. . .	Surveyor General of India.	
14	Oct. 1, 1884	Oct. 1, 1884	24 1 16c	In charge Secondary Triangulation Party, Mussoorie.	{ Offg. Assistant Superintendent, 1st grade. (c) Exclusive of 349 days furlough, 77 days' leave on M.C. and 33 days preparatory leave under new rules. Joined the Junior Branch 19th February 1868.
15	April 11, 1873	Oct. 10, 1882	. . .	Afghan Boundary Commission . . .	Offg. Deputy Superintendent, 4th grade.
16	Sept. 22, 1859	Nov. 1, 1883	. . .	Offg. Deputy Surveyor General. Offg. in charge Trigl. Survey Branch.	
17	Mar. 1, 1866	Nov. 10, 1884	. . .	In charge Nos. 1 and 2 Astronomical Parties, Poona.	
18	Nov. 12, 1859	Jan. 12, 1884	. . .	On duty, Europe.	
19	Dec. 18, 1866	Oct. 1, 1884	. . .	In charge Thana District Survey, Konkan, Bombay Presidency, Poona.	
20	Sept. 11, 1874	April 15, 1883	. . .	In charge Andaman Topogl. Survey, Mussoorie.	Offg. Deputy Superintendent, 4th grade.
21	Sept. 12, 1883	Sept. 12, 1883	. . .	Guzerat Survey, Poona.	Offg. Assistant Superintendent, 1st grade.
22	July 23, 1866	April 29, 1883	. . .	Afghan Boundary Commission . . .	Offg. Deputy Superintendent, 2nd grade.
23	April 1, 1868	Nov. 10, 1884	26 7 27	In charge Burma Topographical Survey, Rangoon.	{ On furlough from 5th June 1870, and special extension till 12th September 1882. Joined the Junior Branch 1st September 1853. (Service reckoned under new rules.
24	Aug. 13, 1867	Aug. 7, 1884	. . .	In charge Henzada District [Cadastral] Survey, British Burma, Rangoon.	
25	Nov. 5, 1868	July 1, 1882	15 8 26	In charge Shuangyheen District Survey, British Burma, Rangoon.	Offg. Deputy Superintendent, 4th grade. Joined the Junior Branch 25th Sept. 1854. Sick leave from 4th July to 3rd August 1867. Sick leave from 10th August to 30th November 1867. Europe, medical certificate, from 23rd July 1871 to 10th November 1872. Furlough to Europe from 1st May 1880 to 3rd December 1881.
26	June 11, 1883	Nov. 28, 1884	. . .	Mysore Topographical Survey, Bangalore.	
27	Feb. 22, 1883	Nov. 10, 1884	29 6 0d	Akyab District [Cadastral] Survey, British Burma, Akyab.	{ Service reckoned under old rules. Special leave for 4 months from 21st January 1858, which was overruled from 21st May to 10th August 1868. Commencement of second service, 17th August 1858. Joined the Junior Branch, 4th December 1854.
28	Mar. 15, 1880	Jan. 10, 1884	. . .	Gorakhpur District [Cadastral] Survey, N.-W. P., Naini Tal.	Officiating Deputy Superintendent, 4th grade.

* Applies only to officers who are under the Uncovenanted Service Rules.

General Alphabetical List of the Officers of the Senior Department of the

1	2	3	4	5	6	7
Number.	Names of Officers and Branch to which originally posted.	Passed in Vernacular.	Age.	Rank.	Grade.	Salary.
			Y. M. D.			R a. p.
29	Macdonald, Bt. Col. Donald, s.c. [Rev.]	P. H.	49 0 21	Deputy Superintendent	2nd grade	
30	McCullagh, Major J. R., B.E. [G. T. S.]	L. S.	42 9 5	Ditto	4th grade	1,182 10 0
31	McGill, Mr. J. [G. T. S.]	Not passed	54 2 9	Ditto	Ditto	
32	Patterson, Mr. W. H. [Rev.]	L. S.	46 3 6	Assistant Superintendent	1st grade	600 0 0
33	Pollen, Lieut. W. H., B.E. *	L. S.	25 2 20	Ditto	2nd grade	670 0 0
34	Pullan, Lt.-Col. A., s.c. [G. T. S.]	P. H.	48 9 0	Deputy Superintendent	Ditto	1,300 0 0
35	Rogers, Major M. W., B.E. [G. T. S.]	L. S.	42 10 26	Ditto	3rd grade	1,182 10 0
36	Ryall, Mr. E. C. [G. T. S.]	Not passed	46 11 15	Assistant Superintendent	1st grade	600 0 0
37	Sandeman, Major J. E., s.c. [Rev.]	P. H.	41 3 29	Deputy Superintendent	3rd grade	1,300 0 0
38	Sconce, Bt. Col. J., s.c. [Rev.]	P. H.	48 8 29	Deputy Surveyor General, in charge Revenue Survey Branch		
39	Scott, Mr. G. B. [Rev.]	H. S.	40 5 1	Assistant Superintendent	2nd grade	
40	Steel, Major E. H., s.c. [Rev.]	H. S.	43 7 26	Deputy Superintendent	4th grade	950 0 0
41	Strahan, Major C., B.E. [Topogl.]	Not passed	41 7 25	Ditto	2nd grade	1,600 10 0
42	Strahan, Major G., B.E. [Topogl.]	P. H.	45 10 24	Ditto	1st grade	
43	Talbot, Mr. H. B. [Rev.]	L. S.	54 2 5	Ditto	4th grade	1,000 0 0
44	Talbot, Lt. The Hon'ble M. G., B.E. *	H. S.	30 3 17	Assistant Superintendent	1st grade	920 0 0
45	Tanner, Bt.-Col. H. C. B., Bombay s.c. [Rev.]	P. H.	49 5 15	Deputy Superintendent	2nd grade	1,300 0 0
46	Thuillier, Bt. Lieut.-Col. H. R., B.E. [G. T. S.]	P. H.	46 9 5	Deputy Surveyor General, Officiating in charge Revenue Survey Branch		2,200 0 0
47	Wahab, Lieut. R. A., B.E. *	H. S.	29 8 18	Assistant Superintendent	1st grade	670 0 0
48	Waterhouse, Major J., s.c. [Topogl.]	P. H.	42 5 8	Deputy Superintendent	3rd grade	1,100 0 0
49	Wilkins, Lt.-Col. W. H., s.c. [Rev.]	P. H.	43 2 25	Ditto	Ditto	1,300 0 0
50	Wilmer, Major J. R., s.c. [Topogl.]	H. S.	43 11 12	Ditto	4th grade	1,100 0 0
51	Woodthorpe, Bt. Lieut.-Col. R. G., B.E. [Topogl.]	L. S.	40 3 8	Ditto	Ditto	990 0 0

* Joined the Department after the amalgamation of 1st January 1878.

Survey of India as it stood on the 1st January 1885—concluded.

8	9	10	11	12	
Number.	Date of first appointment to Department.	Date of appointment to present grade.	*Period of service counting for pension on 1st Jan. 1885.	Present Post.	REMARKS.
			Y. M. D.		
29	Dec. 19, 1860	Jan. 1, 1878		On furlough	For 2 years from 7th March 1884.
30	Feb. 12, 1869	July 1, 1882		In charge Mysore Topographical Survey, Bangalore.	Offr. Deputy Superintendent, 3rd grade.
31	Mar. 1, 1871	Feb. 1, 1883	30 8 12	On furlough	For 1 year 11 months and 18 days, from 7th November 1883. Furlough for 1 year, from 4th July 1879. Joined the Junior Branch, 1st October 1851. Service reckoned under new rules.
32	Jan. 22, 1883	Oct. 1, 1884	22 11 15	In charge Bhopal and Malwa Topographical Survey, Poona.	Joined the Junior Branch 1st December 1851. Leaves on private affairs from 1st May to 31st August 1862. Ditto to Europe from 20th July 1872 to 18th January 1873, and from 11th July 1879 to 2nd January 1880.
33	April 26, 1884	April 26, 1884		Central India and Rajputana Topographical Survey, Mussoorie.	Offr. Assistant Superintendent, 1st grade.
34	Jan. 18, 1863	Nov. 28, 1884		In charge Kattywar and Cutch Survey, Poona.	
35	July 30, 1866	Aug. 7, 1884		In charge Mathematical Instrument Office and Correspondence Office, Head Quarters, Calcutta.	Assistant Surveyor General.
36	April 1, 1873	Feb. 1, 1883	29 7 10	Darjeeling and Nepal Boundary Parties, Mussoorie.	Joined the Junior Branch, 25th April 1856. Two hundred and twenty-five days' sick leave included under old rules. Sick leave for 20 days from 10th December 1883 excluded.
37	Oct. 6, 1864	Jan. 1, 1879		In charge Gorukpur District [Cadastral] Survey, N.-W. P., Naini Tal.	Offr. Deputy Superintendent, 2nd grade.
38	Oct. 21, 1859	Jan. 1, 1879		On Furlough.	For 2 years from 14th March 1884.
39	Nov. 10, 1884	Nov. 10, 1884		Baluchistan Topog. Survey, Mussoorie.	Offr. Deputy Superintendent, 1st grade. Joined the Junior Branch 1st May 1863.
40	Feb. 1, 1867	Jan. 10, 1884		In charge, Ajmere-Mhairwara Districts Survey, Rajputana and superintending detached Parties working in N.-W. P. and C. P., Mussoorie.	
41	Sept. 26, 1863	Jan. 10, 1884		In charge Engraving and Cartographic Offices, Head Quarters, Calcutta.	Offr. Deputy Superintendent, 1st grade. Assistant Surveyor General.
42	July 2, 1862	Nov. 10, 1884		On furlough	For 1 year from 7th May 1884.
43	April 1, 1866	July 1, 1882	36 1 0	In charge Akyab District [Cadastral] Survey, British Burma, Akyab.	Offr. Deputy Superintendent, 3rd grade. Joined the Junior Branch 1st December 1848.
44	Mar. 15, 1880	April 29, 1883		Afghan Boundary Commission	Offr. Deputy Superintendent, 4th grade.
45	Oct. 10, 1862	Oct. 1, 1884		In charge Darjeeling and Nepal Boundary Parties, Mussoorie.	
46	May 21, 1859	Oct. 1, 1884		Deputy Surveyor General, Officiating in charge Revenue Survey Branch.	
47	Jan. 8, 1863	Aug. 7, 1884		In charge Baluchistan Topographical Survey, Mussoorie.	
48	July 23, 1866	Jan. 10, 1884		In charge Photographic and Lithographic Offices, Head Quarters, Calcutta.	Assistant Surveyor General.
49	April 27, 1863	Oct. 27, 1878		On duty, Head Quarters, Calcutta	Offr. Deputy Superintendent, 2nd grade.
50	Aug. 24, 1869	July 1, 1882		In charge Mirzapur Topographical Survey, Mussoorie.	Offr. Deputy Superintendent, 3rd grade.
51	July 14, 1871	Nov. 28, 1884		In charge North-East Frontier, Topographical Survey, Shillong.	

* Applies only to officers who are under the Uncovenanted Service Rules.

General Alphabetical List of the Officers of the Junior or Subordinate

1	2	3	4	5	6	7
Number.	Names of Officers and Branch to which originally posted.	Passed in Vernacular.	Age.	Rank.	Grade.	Salary.
			Y. M. D.			R a. p.
1	Adams, Mr. F. . . . [Topogl.]	. . . .	48 8 6	Surveyor	2nd grade	400 0 0
2	Atkinson, Mr. D. . . . [Topogl.]	. . . .	47 7 24	Ditto	1st grade	500 0 0
3	Atkinson, Mr. E. S. P. . . [Topogl.]	. . . .	39 5 4	Ditto	3rd grade	350 0 0
4	Atkinson, Mr. G. W. E. . . [G. T. S.]	. . . .	41 2 20	Ditto	2nd grade	400 0 0
5	Babonau, Mr. T. W. (<i>Junior</i>) *	L. S.	18 5 21	Assistant Surveyor	3rd grade	120 0 0
6	Barkley, Mr. W. C. G. . . [Topogl.]	. . . .	33 2 9	Ditto	1st grade	210 0 0
7	Barker, Mr. J. A. . . . [Topogl.]	. . . .	38 8 18	Ditto	Ditto	250 0 0
8	Barker, Mr. J. P. . . . *	. . . .	19 4 10	Ditto	3rd grade	128 0 0
9	Bedford, Mr. N. . . . *	. . . .	23 5 15	Ditto	Ditto	120 0 0
10	Beechey, Mr. P. . . . *	. . . .	23 5 14	Ditto	Ditto	128 0 0
11	Beloham, Mr. G. . . . [G. T. S.]	H. S.	39 10 15	Surveyor	Ditto	350 0 0
12	Berkeley, Mr. E. F. . . . *	. . . .	20 2 10	Assistant Surveyor	Ditto	128 0 0
13	Berkeley, Mr. L. F. . . . [Rev.]	L. S.	30 4 3	Ditto	2nd grade	168 0 0
14	Bond, Mr. J. . . . [G. T. S.]	. . . .	34 11 24	Surveyor	4th grade	300 0 0
15	Buttress, Mr. W. S. . . . [Rev.]	. . . .	40 10 12	Ditto	3rd grade	350 0 0
16	Campbell, Mr. D. . . . [Topogl.]	. . . .	32 1 13	Assistant Surveyor	2nd grade	168 0 0
17	Campbell, Mr. G. . . . [Rev.]	. . . .	36 5 19	Ditto	1st grade	210 0 0
18	Charrier, Mr. H. A. . . . *	L. S.	20 2 8	Ditto	3rd grade	120 0 0
19	Christie, Mr. A. . . . [G. T. S.]	H. S.	39 3 1	Surveyor	Ditto	350 0 0
20	Clarke, Mr. L. H. . . . [G. T. S.]	. . . .	50 6 27	Ditto	2nd grade	400 0 0
21	Claudius, Mr. T. E. M. . . [Topogl.]	. . . .	38 7 0	Ditto	4th grade	300 0 0
22	Collins, Mr. D. J. . . . [G. T. S.]	. . . .	30 7 27	Assistant Surveyor	2nd grade	. . . .
23	Connor, Mr. E. J. . . . [G. T. S.]	L. S.	36 4 15	Surveyor	4th grade	300 0 0
24	Connor, Mr. J. . . . [Rev.]	. . . .	37 3 24	Ditto	Ditto	300 0 0
25	Corkery, Mr. H. . . . [G. T. S.]	L. S.	33 4 10	Assistant Surveyor	2nd grade	. . . .
26	Cornelius, Mr. W. J. . . . [Topogl.]	L. S.	35 9 1	Ditto	1st grade	250 0 0
27	Cowley, Mr. P. A. G. . . . [Rev.]	L. S.	42 11 15	Surveyor	Ditto	500 0 0

* Joined the Department after the amalgamation on 1st January 1878.

Department of the Survey of India as it stood on the 1st Jan. 1885.

8	9	10	11	12	
Number.	Date of first appointment to Department.	Date of appointment to present grade.	Period of service counting for pension on 1st Jan. 1885.	Present Post.	REMARKS.
			Y. M. D.		
1	Oct. 1, 1860	April 1, 1883	28 1 27 ^a	On duty at Head Quarters, Calcutta	(a) Inclusive of service as Sub-Surveyor from 3rd November 1860 to 30th September 1860.
2	Aug. 4, 1856	Jan. 22, 1883	28 4 28 ^b	Trigonometrical Branch Office, Dehra Dun.	(b) Service reckoned under old rules.
3	Aug. 13, 1861	Dec. 17, 1880	16 1 2	Mysore Topographical Survey	Temporarily detached under Settlement Officer Royal Pindl, Punjab. Furlough for 1 year 3 months and 13 days, from 26th July 1870 to 6th November 1877, and sick leave for 10 days in September 1867.
4	Aug. 1, 1859	June 7, 1881	25 2 20 ^c	Trigonometrical Branch Office, Dehra Dun.	(c) Service reckoned under old rules.
5	Jan. 15, 1884	Jan. 15, 1884	. . . .	Ajmere-Mhairwara Districts Survey, Rajputana.	
6	Dec. 1, 1871	Feb. 22, 1883	11 2 9 ^d	Darjeeling Survey	(d) Inclusive of special leave to Europe on full pay for 1 year 10 months and 26 days, from 26th April 1876 to 2nd March 1878.
7	Sept. 1, 1865	Jan. 1, 1878	16 8 18	Mysore Topographical Survey.	
8	Dec. 23, 1883	Dec. 23, 1883	. . . .	Ferozepur and Jullundur Districts Survey, Punjab.	
9	Jan. 10, 1884	Jan. 10, 1884	0 11 21	Gorukpur District [Cadastral] Survey, N.-W. P.	
10	Dec. 1, 1882	Jan. 22, 1883	1 5 14	Central India and Rajputana Topographical Survey.	
11	Nov. 1, 1862	April 1, 1883	22 2 0 ^e	Tidal and Leveling Operations, India, Burma, Ceylon, &c.	(e) Service reckoned under old rules.
12	Sept. 1, 1883	Sept. 1, 1883	. . . .	Chhatisgarh Division [Cadastral] Survey, C. P.	
13	Aug. 16, 1875	Nov. 13, 1883	8 4 3	Basti District [Cadastral] Survey, N.-W. P.	
14	Oct. 18, 1866	Oct. 1, 1884	12 11 4 ^f	Trigonometrical Branch Office, Dehra Dun.	(f) Exclusive of 20 days' sick leave.
15	Sept. 1, 1860	Nov. 13, 1879	24 4 0	Ferozepur and Jullundur Districts Survey, Punjab.	Copyist, from 1st to 30th September 1860.
16	Nov. 1, 1874	Nov. 1, 1883	10 1 13	Andaman Topogl. Survey	Joined as a Sub-Surveyor on 3rd July 1873.
17	Jan. 1, 1864	Jan. 22, 1883	13 5 9	Ferozepur and Jullundur Districts Survey, Punjab.	Furlough for 1 year, from 22nd September 1881 to 21st September 1882. Office Assistant, from 1st January 1864 to 20th February 1874.
18	April 21, 1884	April 21, 1884	. . . .	Kattywar and Cutch Survey.	
19	Aug. 7, 1863	June 2, 1884	17 3 1	Guzerat Survey.	
20	Nov. 26, 1855	Dec. 1, 1872	29 1 5	Trigonometrical Branch Office, Dehra Dun, as Solar Photographer.	
21	Aug. 10, 1863	Jan. 1, 1880	16 7 0	Baluchistan Topogl. Survey.	
22	Oct. 6, 1873	Nov. 1, 1882	8 3 9 ^g	On furlough	(g) For 1 year 1st October 1884. Exclusive of 49 days' leave on medical certificate, from 2nd July to 16th August 1878.
23	Mar. 1, 1865	Nov. 1, 1883	13 10 10 ^h	Tidal and Leveling Operations, India, Burma, Ceylon, &c.	(h) Exclusive of 6 months and 5 days' leave on private affairs under new rules.
24	Feb. 15, 1865	June 2, 1884	15 3 24	Kamrup District [Cadastral] Survey, Assam.	
25	Nov. 20, 1873	April 1, 1881	8 2 12 ⁱ	On extraordinary leave	For 8 months. Leave on private affairs for 1 year from 12th April 1882. Extension for 6 months. Further extension for 6 months. Further extension for 6 months. (i) Exclusive of leave without pay, from 21st March to 13th November 1878.
26	Aug. 15, 1866	July 8, 1879	13 9 1	Central India and Rajputana Topographical Survey.	
27	Sept. 1, 1859	Nov. 1, 1883	24 0 22	In charge Chhatisgarh Division [Cadastral] Survey, C. P.	Furlough from 1st July 1882 to 9th October 1883.

General Alphabetical List of the Officers of the Junior or Subordinate Department

of the Survey of India as it stood on the 1st January 1885—continued.

1	2	3	4	5	6	7
Number.	Names of Officers and Branch to which originally posted.	Passed in Vernacular.	Age.	Rank.	Grade.	Salary.
			Y. M. D.			R. a. p.
28	Coxen, Mr. J. T. U. [Rev.]		44 3 22	Surveyor	4th grade	300 0 0
29	Cusson, Mr. G. D. [G. T. S.]	L. S.	38 3 7	Assistant Surveyor	1st grade	250 0 0
30	Dickinson, Mr. R. R. [Rev.]	L. S.	33 5 6	Ditto	Ditto	200 0 0
31	Doran, Mr. P. J. W. [Topogl.]	L. S.	35 7 27	Ditto	Ditto	300 0 0
32	Downman, Mr. H. [Rev.]		38 6 20	Surveyor	3rd grade	350 0 0
33	Drew, Mr. E. B. M. [Rev.]		30 8 10	Assistant Surveyor	2nd grade	160 0 0
34	Dunne, Mr. T. H. [Rev.]	L. S.	37 0 5	Surveyor	4th grade	300 0 0
35	Ewing, Mr. A. *		23 0 0	Assistant Surveyor	3rd grade	136 0 0
36	Ewing, Mr. R. C. D. [Rev.]	H. S.	36 6 20	Ditto	1st grade	325 0 0
37	Ewing, Mr. W. H. D. *		27 4 7	Ditto	2nd grade	160 0 0
38	Fielding, Mr. W. A. [G. T. S.]	L. S.	36 7 13	Ditto	1st grade	250 0 0
39	Freeman, Mr. T. F. [Rev.]	L. S.	33 9 27	Ditto	Ditto	250 0 0
40	Gastaud, Mr. M. *		22 9 24	Ditto	3rd grade	128 0 0
41	George, Mr. A. *		29 11 18	Ditto	2nd grade	160 0 0
42	George, Mr. C. *		32 0 24	Ditto	Ditto	168 0 0
43	Gibson, Mr. A. J. [Rev.]		43 1 0	Surveyor	3rd grade	350 0 0
44	Gibson, Mr. R. A. [Topogl.]		30 5 26	Assistant Surveyor	1st grade	210 0 0
45	Graham, Mr. E. [Topogl.]	L. S.	31 2 0	Ditto	2nd grade	200 0 0
46	Grant, Mr. F. [Rev.]		48 9 6	Surveyor	1st grade	500 0 0
47	Gwynne, Mr. N. C. [G. T. S.]		41 9 25	Ditto	4th grade	300 0 0
48	Hall, Mr. G. T. [G. T. S.]	L. S.	32 8 24	Assistant Surveyor	1st grade	210 0 0
49	Hamer, Mr. C. F. [Topogl.]		38 4 24	Surveyor	4th grade	300 0 0
50	Hanby, Mr. H. T. [Rev.]	L. S.	38 2 12	Ditto	3rd grade	350 0 0
51	Hickie, Mr. J. [G. T. S.]	L. S.	35 11 17	Assistant Surveyor	1st grade	250 0 0
52	Higgs, Mr. J. A. *		24 9 0	Ditto	3rd grade	136 0 0
53	Hill, Mr. E. P. S. [Rev.]	{ H. S. L. S. Persian }	30 6 17	Ditto	1st grade	200 0 0
54	Hughes, Mr. B. R. *		18 6 18	Ditto	3rd grade	128 0 0
55	James, Mr. A. J. [Topogl.]	L. S.	38 1 12	Surveyor	4th grade	300 0 0
56	Jarbo, Mr. G. W. [Rev.]	L. S.	37 3 15	Assistant Surveyor	1st grade	250 0 0
57	Johnson, Mr. W. E. *		23 3 16	Ditto	3rd grade	120 0 0
58	Keating, Mr. J. [G. T. S.]		30 7 27	Ditto	2nd grade	168 0 0

8	9	10	11	12
Number.	Date of first appointment to Department.	Date of appointment to present grade.	Period of service counting for pension on 1st Jan. 1884.	REMARKS.
			Y. M. D.	
28	May 16, 1863	Feb. 22, 1883	20 7 25	South Deccan Topogl. Survey, Bombay Presidency Sick leave, from 9th to 31st October 1878; and 6 months from 12th November 1878. On furlough in India for 4 months, from 28th May to 26th October 1883. (a) Exclusive of furlough for 394 days, from 1st November 1879 to 30th October 1880. Apprentice, from 1st April 1872 to 16th April 1873.
29	May 8, 1868	April 1, 1881	15 3 7 ^a	Andaman Topogl. Survey
30	April 16, 1873	Sep. 1, 1884	11 5 6	Thana District Topogl. Survey, Konkan, Bombay Presidency.
31	Feb. 1, 1867	July 6, 1880	12 11 3	Draftsman, Head Quarters, Calcutta.
32	Oct. 16, 1862	Sept. 5, 1883	22 2 1	Shuaygheen District Survey, British Burma. Absent without leave 9 days. Sick leave 2 days in October 1865, 4 days in December 1865, and from 11th to 16th December 1866.
33	May 5, 1873	April 1, 1884	6 11 26 ^b	Ferozepur and Jullundur Districts Survey, Punjab. (b) Exclusive of leave without pay, from 17th April 1877 to 31st December 1878. On half-pay list, from 8th November 1879 to 31st March 1881.
34	Feb. 15, 1865	Sep. 1, 1884	14 11 24	Henzada District [Cadastral] Survey, British Burma. Absent without leave 1 day, and sick leave 10 days in October 1865.
35	Nov. 16, 1881	Nov. 1, 1882	1 0 0	North-East Frontier Topogl. Survey.
36	June 9, 1866	Aug. 1, 1878	14 6 20	Draftsman, Head Quarters, Calcutta.
37	April 15, 1878	Nov. 28, 1884	5 2 6 ^d	Henzada District [Cadastral] Survey, British Burma. (d) Exclusive of 2 months and 1 day's suspension, from 24th May to 1st July 1880, and sick leave from 2nd to 28th July 1880.
38	May 3, 1868	April 1, 1881	14 7 13	Kattywar and Cutch Survey.
39	Sept. 9, 1868	April 1, 1881	9 2 27	Gorukpur District [Cadastral] Survey, N.-W. P. Sick leave for 2 years, from 1st May 1880; extension for 9 months, without pay, up to 31st Jan. 1883.
40	May 1, 1882	Jan. 17, 1883	0 9 24	Central India & Rajputana Topogl. Survey.
41	Oct. 15, 1878	Sep. 25, 1884	6 2 17 ^e	Guzerat Survey (e) Exclusive of previous service as Sub-Surveyor.
42	Sept. 5, 1878	Dec. 1, 1883	10 0 24	Bhopal and Malwa Topogl. Survey Previous service as Sub-Surveyor, from 18th August 1874.
43	May 1, 1861	Oct. 11, 1881	23 7 27	Ajmere-Mhairwara Districts Survey, Rajputana. Absent without leave for 3 days in January 1866.
44	Dec. 1, 1870	Sept. 5, 1883	6 5 26	Burma Topogl. Survey Previous service on probation in G. T. S., from 1st October 1868 to 30th June 1870. Apprentice Draftsman, Surveyor General's Office, from 10th October to 30th November 1870. Probationary Assistant Surveyor, 1st December 1870. Previous service as Sub-Surveyor, from 1st November 1872.
45	Aug. 11, 1873	April 1, 1881	9 2 0	Ditto ditto
46	July 11, 1856	Feb. 22, 1883	28 5 21	Shuaygheen District Survey, British Burma.
47	Oct. 19, 1863	Oct. 1, 1874	19 9 25	Kattywar and Cutch Survey.
48	Nov. 22, 1872	April 1, 1883	10 8 24	Ditto ditto.
49	Aug. 3, 1863	July 13, 1878	16 2 24	Mirzapur Topogl. Survey.
50	Nov. 13, 1862	Oct. 29, 1883	22 1 18	Basti District [Cadastral] Survey, N.-W. P.
51	April 29, 1868	April 1, 1881	13 5 17	South Deccan Topogl. Survey, Bombay Presidency. Exclusive of 6 months' sick leave.
52	Sept. 12, 1881	Feb. 1, 1882	2 9 0	Bhopal and Malwa Topogl. Survey Previous service as Apprentice Draftsman, from 31st July 1878.
53	Nov. 16, 1872	June 2, 1884	8 6 17	Basti District [Cadastral] Survey, N.-W. P.
54	Oct. 15, 1883	Oct. 15, 1883		Ditto ditto.
55	June 15, 1864	Nov. 22, 1880	16 1 12	Mysore Topogl. Survey.
56	Nov. 1, 1866	Jan. 1, 1880	15 3 0	Akynb District [Cadastral] Survey, British Burma. Sick leave for 15 days, from 26th May to 9th June 1869.
57	Aug. 18, 1884	Aug. 18, 1884	0 4 15	Basti District [Cadastral] Survey, N.-W. P.
58	June 1, 1874	Feb. 22, 1883	8 7 27	Andaman Topogl. Survey.

General Alphabetical List of the Officers of the Junior or Subordinate Department

1	2	3	4	5	6	7
Number.	Names of Officers and Branch to which originally posted.	Passed in Vernacular.	Age.	Rank.	Grade.	Salary.
			Y. M. D.			R a. p.
59	Keelan, Mr. H. E. T. . . . [G. T. S.]	. . . .	41 9 1	Surveyor	1st grade	500 0 0
60	Kelly, Mr. J. C. . . . *	. . . .	27 2 23	Assistant Surveyor	2nd grade	160 0 0
61	Kelly, Mr. W. M. . . . [Rev.]	L. S.	30 4 25	Ditto	1st grade	210 0 0
62	Kennedy, Mr. J. M. . . . [G. T. S.]	. . . .	28 1 28	Ditto	2nd grade	168 0 0
63	King, Mr. D. A. . . . [Rev.]	. . . .	38 1 26	Surveyor	4th grade	300 0 0
64	Kitchen, Mr. A. . . . [Topogl.]	. . . .	31 11 4	Assistant Surveyor	1st grade	210 0 0
65	Kitchen, Mr. F. . . . [Topogl.]	. . . .	33 9 7	Surveyor	4th grade	300 0 0
66	Kitchen, Mr. H. T. . . . [Topogl.]	. . . .	36 6 23	Assistant Surveyor	1st grade	250 0 0
67	Knight, Mr. G. A. . . . [Topogl.]	. . . .	30 8 9	Ditto	2nd grade	176 0 0
68	Kraal, Mr. C. S. . . . [Rev.]	L. S.	31 2 6	Ditto	Ditto	168 0 0
69	Lawson, Mr. A. M. . . . [Rev.]	L. S.	45 11 29	Surveyor	Ditto	400 0 0
70	Lilley, Mr. W. H. . . . [Topogl.]	. . . .	36 0 28	Assistant Surveyor	1st grade	250 0 0
71	Little, Mr. E. G. . . . [Rev.]	. . . .	39 2 19	Surveyor	3rd grade	350 0 0
72	Littlewood, Mr. H. R. . . . [Rev.]	. . . .	41 1 25	Ditto	2nd grade	400 0 0
73	Madras, Mr. S. O. . . . [Rev.]	. . . .	34 4 16	Assistant Surveyor	1st grade	250 0 0
74	Martin, Mr. E. J. . . . [Rev.]	. . . .	33 10 15	Ditto	Ditto	250 0 0
75	May, Mr. J. A. . . . [Topogl.]	. . . .	43 7 16	Surveyor	2nd grade	400 0 0
76	McA'Fee, Mr. C. H. . . . [G. T. S.]	L. S.	35 1 15	Ditto	4th grade	300 0 0
77	McGill, Mr. G. A. . . . [Topogl.]	L. S.	46 8 7	Ditto	1st grade	600 0 0
78	McHatton, Mr. J. . . . [Rev.]	L. S.	35 5 14	Assistant Surveyor	Ditto	250 0 0
79	McNair, Mr. W. W. . . . [Topogl.]	L. S.	34 3 18	Surveyor	4th grade	300 0 0
80	Mills Mr. T. J. J. . . . *	. . . .	21 0 1	Assistant Surveyor	3rd grade	120 0 0
81	Moore, Mr. F. W. . . . *	. . . .	20 0 11	Ditto	Ditto	128 0 0
82	Murphy, Mr. J. . . . [Rev.]	. . . .	32 5 19	Ditto	1st grade	210 0 0
83	Newland, Mr. J. . . . [Rev.]	L. S.	47 4 26	Ditto	Ditto	250 0 0
84	Norman, Mr. C. . . . [G. T. S.]	L. S.	28 7 12	Ditto	2nd grade	168 0 0
85	Norman, Mr. S. F. . . . [G. T. S.]	. . . .	30 4 23	Ditto	Ditto	168 0 0
86	O'Donel, Mr. J. H. . . . [Rev.]	. . . .	39 5 2	Surveyor	4th grade	300 0 0
87	Ogle, Mr. M. J. . . . [Topogl.]	. . . .	42 9 27	Ditto	3rd grade	350 0 0
88	O'Sullivan, Mr. W. J. . . . [G. T. S.]	. . . .	40 10 17	Ditto	Ditto	350 0 0
89	Parker, Mr. G. E. . . . [Rev.]	. . . .	34 10 18	Assistant Surveyor	1st grade	210 0 0
90	Pemberton, Mr. J. S. . . . [Rev.]	L. S.	41 5 23	Surveyor	2nd grade	400 0 0
91	Penrose, Mr. W. H. . . . [Rev.]	L. S.	33 2 24	Assistant Surveyor	1st grade	220 0 0

* Joined the Department after the amalgamation on 1st January 1878.

of the Survey of India as it stood on the 1st January 1885—continued.

8	9	10	11	12
Number.	Date of first appointment to Department.	Date of appointment to present grade.	Period of service counting for pension on 1st Jan. 1885.	REMARKS.
			Y. M. D.	
59	Aug. 17, 1858	Oct. 29, 1883	18 9 0a	Tidal and Leveling Operations, India, Burma, Ceylon, &c. (a) Exclusive of 11 months and 13 days' furlough, and 18 days' sick leave under new rules.
60	Oct. 11, 1878	Sep. 1, 1884	5 2 23	Kamrup Dist. [Cadastral] Survey, Assam.
61	Oct. 1, 1872	Nov. 21, 1883	8 4 25	Thana Dist. Topogl. Survey, Konkan, Bombay Presidency. Re-appointed to the Department, 1st October 1876, after employment in the Forest Department, from 1st November 1877 to 30th September 1878.
62	Aug. 19, 1875	Nov. 24, 1883	6 1 28	Mysore Topogl. Survey.
63	April 12, 1864	April 1, 1883	16 1 25	Kamrup District [Cadastral] Survey, Assam. Apprentice, from 12th April to 30th June 1864.
64	Oct. 1, 1872	Dec. 1, 1883	9 11 4	Baluchistan Topographical Survey.
65	Oct. 1, 1864	Sept. 23, 1883	16 7 7	Mysore Topogl. Survey. Exclusive of two months' sick leave.
66	Nov. 1, 1867	April 1, 1881	14 6 23	Mirzapur Topogl. Survey.
67	Aug. 11, 1873	Mar. 7, 1882	8 8 9	South Deccan Topogl. Survey, Bombay Presidency.
68	July 24, 1874	April 1, 1883	9 1 19	Kamrup Dist. [Cadastral] Survey, Assam. Sick leave, from 6th to 22nd February 1879.
69	Nov. 18, 1862	June 2, 1884	22 1 13	Thana District Topogl. Survey, Konkan, Bombay Presidency.
70	May 1, 1868	April 1, 1881	13 7 7b	Mirzapur Topogl. Survey (b) Exclusive of leave on medical certificate, from 14th December 1877 to 3rd June 1879. Previous service as Apprentice, from 1st November 1867.
71	Jan. 1, 1860	Sept. 23, 1883	25 0 0	Gorakhpur District [Cadastral] Survey, N.-W. P. Apprentice, from 1st January 1860 to 4th November 1862.
72	Oct. 6, 1860	Oct. 29, 1883	24 2 26	Henzada District [Cadastral] Survey, British Burma.
73	July 6, 1868	April 1, 1881	12 4 16	On duty at Head Quarters, Calcutta.
74	Sept. 16, 1867	April 1, 1881	11 2 15	Ditto ditto Furlough, from 1st April to 30th November 1883. Office Assistant, from 10th September 1867 to 31st July 1870.
75	Oct. 1, 1860	Jan. 1, 1883	25 0 0	Bhopal and Malwa Topogl. Survey Apprentice Draftsman, from 1st January 1860.
76	Sept. 6, 1864	Aug. 1, 1875	13 0 15	Guzerat Survey Sick leave for 1 month, from 30th December 1882. Passed the Poona C. E. College Examination in 1864.
77	April 8, 1855	Mar. 7, 1882	29 8 23	Chief Draftsman, Head Quarters, Calcutta Sick leave, from 1st November 1871 to 28th February 1872. Service reckoned under old rules.
78	July 1, 1867	April 1, 1881	12 5 14	Shuaygheen District Survey, British Burma. Furlough for 1 year, from 1st January to 31st December 1879.
79	Sept. 1, 1867	Mar. 7, 1882	11 3 10	Trigonometrical Branch Office, Dehra Dun. Furlough for 1 year, from 23rd March 1883. On duty in England for 3 months from 28th March 1884. Extraordinary leave for 6 weeks from 28th June 1884.
80	Mar. 14, 1884	Mar. 14, 1884	. . .	Mysore Topogl. Survey.
81	Dec. 13, 1883	Dec. 13, 1883	. . .	Ajnere and Mhairwara Districts Survey, Rajputana.
82	Nov. 22, 1868	Aug. 10, 1883	10 5 19	Gorakhpur District [Cadastral] Survey, N.-W. P. Office Assistant, from 22nd November 1869 to 31st October 1871.
83	Oct. 22, 1863	Jan. 1, 1878	21 2 10	Thana District Topogl. Survey, Konkan, Bombay Presidency.
84	Oct. 12, 1874	Oct. 6, 1883	6 7 12	Guzerat Survey.
85	Sept. 1, 1874	April 30, 1883	8 4 23	Ditto.
86	Oct. 1, 1863	Oct. 22, 1879	17 5 20	Kamrup Dist. [Cadastral] Survey, Assam.
87	July 1, 1863	Jan. 1, 1883	19 9 27	North-East Frontier Topogl. Survey Furlough to Europe for 1 year, from 21st November 1877 to 20th November 1878.
88	Oct. 1, 1863	Oct. 1, 1884	18 10 17	Darjeeling Survey.
89	Nov. 18, 1870	Jan. 17, 1883	12 10 18	Shuaygheen District Survey, British Burma.
90	Oct. 6, 1860	Sept. 23, 1883	24 2 21	Basti Dist. [Cadastral] Survey, N.-W. P. Overstayed privilege leave by 5 days in June 1869.
91	Aug. 11, 1869	Nov. 1, 1882	11 1 17	Burma Topogl. Survey Leave on medical certificate, from 22nd October to 28th November 1883.

General Alphabetical List of the Officers of the Junior or Subordinate Department

1	2	3	4	5	6	7
Number.	Names of Officers and Branch to which originally posted.	Passed in Vernacular.	Age.	Rank.	Grade.	Salary.
			Y. M. D.			R a. p.
92	Peters, Mr. P. A. . . . [Rev.]	L. S.	30 0 23	Assistant Surveyor	2nd grade	168 0 0
93	Peychers, Mr. H. W. . . . [G. T. S.]		42 0 18	Surveyor	3rd grade	350 0 0
94	Peyton, Mr. J. . . . [G. T. S.]		53 6 0	Ditto	1st grade	500 0 0
95	Pocock, Mr. L. J. . . . [G. T. S.]	H. S.	41 3 5	Ditto	3rd grade	350 0 0
96	Potter, Mr. C. D. . . . [G. T. S.]	L. S.	39 3 27	Assistant Surveyor	1st grade	300 0 0
97	Price, Mr. W. C. . . . [G. T. S.]		38 6 8	Surveyor	4th grade	300 0 0
98	Prunty, Mr. P. F. . . . [G. T. S.]		30 0 6	Assistant Surveyor	2nd grade	168 0 0
99	Rendell, Mr. T. H. . . . [G. T. S.]		40 5 9	Surveyor	4th grade	300 0 0
100	Robert, Mr. W. . . . [Topogl.]		34 4 2	Assistant Surveyor	1st grade	250 0 0
101	Scott, Mr. J. R. . . . [Rev.]	L. S.	35 9 27	Assistant Surveyor	Ditto	250 0 0
102	Senior, Mr. R. W. . . . *	L. S.	24 1 18	Ditto	2nd grade	160 0 0
103	Serrao, Mr. P. J. . . . *		23 5 28	Ditto	3rd grade	120 0 0
104	Seyers, Mr. C. W. F. . . . [Rev.]		41 4 15	Ditto	1st grade	230 0 0
105	Shaw, Mr. T. . . . [Rev.]	L. S.	32 1 15	Ditto	Ditto	250 0 0
106	Skilling, Mr. W. V. . . . *		17 8 6	Ditto	3rd grade	120 0 0
107	Smart, Mr. A. D. . . . [Rev.]		54 2 17	Surveyor	Ditto	350 0 0
108	Smart, Mr. A. W. . . . [Rev.]		33 10 1	Assistant Surveyor	1st grade	210 0 0
109	Smart, Mr. O. D. . . . *		27 3 15	Ditto	3rd grade	136 0 0
110	Smart, Mr. P. C. H. . . . *		29 3 15	Ditto	Ditto	220 0 0
111	Smart, Mr. R. B. . . . [Rev.]	L. S.	37 6 2	Surveyor	4th grade	300 0 0
112	Smith, Mr. J. . . . *		21 3 17	Assistant Surveyor	3rd grade	120 0 0
113	Smylie, Mr. S. M. . . . [Rev.]	L. S.	44 1 7	Surveyor	2nd grade	450 0 0
114	Stotesbury, Mr. W. . . . [Topogl.]	{ H. S. L. S. Canarese.	37 5 6	Ditto	4th grade	350 0 0
115	Swiney, Mr. G. C. . . . [Rev.]		35 6 4	Assistant Surveyor	1st grade	250 0 0
116	Swiney, Mr. J. S. . . . [Rev.]		34 0 12	Ditto	Ditto	250 0 0
117	Tapsell, Mr. C. . . . [Topogl.]	L. S.	40 1 17	Ditto	Ditto	250 0 0
118	Tate, Mr. G. P. . . . *	L. S.	28 5 9	Ditto	2nd grade	160 0 0
119	Todd, Mr. H. . . . [G. T. S.]		37 4 15	Surveyor	4th grade	300 0 0
120	Todd, Mr. J. . . . [Rev.]		50 7 19	Ditto	2nd grade	400 0 0
121	Todd, Mr. R. . . . [Topogl.]		39 5 20	Assistant Surveyor	1st grade	250 0 0
122	Todd, Mr. W. . . . [G. T. S.]		46 1 21	Surveyor	2nd grade	400 0 0

of the Survey of India as it stood on the 1st January 1885—continued.

8	9	10	11	12	
Number.	Date of first appointment to Department.	Date of appointment to present grade.	Period of service counting for pension on 1st Jan. 1885.	Present Post.	REMARKS.
			Y. M. D.		
92	Nov. 1, 1873	Jan. 17, 1883	8 0 23	Shuaygheen District Survey, British Burma.	
93	April 8, 1862	Mar. 12, 1883	22 8 23	Trigonometrical Branch Office, Dehra Dun.	Service reckoned under old rules.
94	Feb. 3, 1860	April 1, 1874	24 10 27	Darjeeling Survey	Service reckoned under new rules.
95	July 10, 1863	Nov. 1, 1883	19 0 7a	Mysore Topographical Survey	(a) Exclusive of 99 days' sick leave.
96	Oct. 29, 1866	Oct. 1, 1874	17 2 24b	Secondary Triangulation Party	Offg. Surveyor, 4th grade. (b) Exclusive of 88 days' sick leave.
97	Nov. 1, 1863	Oct. 1, 1874	16 6 8	Basti District [Cadastral] Survey, N.-W. P.	
98	May 9, 1874	Jan. 22, 1883	8 0 6	No. 1 Astronomical Party.	
99	Oct. 11, 1864	June 7, 1881	18 5 9	Tidal and Leveling Operations, India, Burma, Ceylon, &c.	
100	Aug. 21, 1869	April 1, 1881	12 4 2	Darjeeling Survey.	
101	Jan. 19, 1867	Nov. 22, 1880	13 9 27	Akyab District [Cadastral] Survey, British Burma.	
102	Dec. 21, 1878	Oct. 1, 1884	2 1 18	Darjeeling Survey.	
103	April 24, 1884	April 24, 1884	0 8 6	Guzerat Survey.	
104	Dec. 1, 1864	June 7, 1881	19 4 15	Ajmere-Mhairwara Districts Survey, Rajputana.	
105	April 21, 1869	April 1, 1881	10 1 15	Gorukpur District [Cadastral] Survey, N.-W. P.	
106	Nov. 24, 1884	Nov. 24, 1884	. . .	Trigonometrical Branch Office Dehra-Dun.	
107	Oct. 1, 1870c	Oct. 1, 1870	14 3 0	In charge Raipur Instruction Party, C.P.	(c) Commencement of second service. On half pay 1st from 1st January 1880 to 26th October 1884.
108	Dec. 1, 1871	Oct. 6, 1883	11 10 1	Akyab District [Cadastral] Survey, British Burma.	Three months' sick leave, from 8th July 1880.
109	Oct. 1, 1881	March 7, 1882	5 1 0	Gorukpur District [Cadastral] Survey, N.-W. P.	Includes service in the temporary or cadastral establishment without interruption, from 1st December 1879 to 30th September 1881.
110	April 18, 1878	Dec. 1, 1883	6 3 6	Map Curator, Head Quarters, Calcutta	Sick leave, from 8th April to 14th September 1882.
111	Jan. 1, 1864	Sept. 5, 1883	15 6 2	Henzada District [Cadastral] Survey, British Burma.	Apprentice, from 1st January to 31st December 1864.
112	Aug. 1, 1884	Aug. 1, 1884	. . .	Kamrup District [Cadastral] Survey, Assam.	
113	July 24, 1860	April 1, 1883	24 1 5	Draftsman, Head Quarters, Calcutta	Furlough, from 8th November 1882 to 11th March 1883.
114	Oct. 4, 1864	July 21, 1883	15 5 6	Ditto ditto.	
115	Sept. 17, 1868	April 1, 1881	13 6 4	Chhattisgarh Division [Cadastral] Survey, C. P.	
116	Jan. 5, 1869	April 1, 1881	12 0 12	Akyab District [Cadastral] Survey, British Burma.	
117	Aug. 2, 1864	Oct. 1, 1872	18 1 17	Guzerat Survey.	
118	Mar. 12, 1878	Nov. 21, 1883	6 5 9	Central India and Rajputana Topogl. Survey.	Apprentice, from 1st March 1874.
119	July 15, 1865	Oct. 6, 1883	15 3 16d	Mysore Topogl. Survey	(d) Exclusive of 30 days' sick leave.
120	Dec. 27, 1863	Feb. 22, 1883	19 3 19	Ferozepur and Jullundur Districts Survey, Punjab.	Furlough in India, from 16th April 1883 to 30th September 1884. Overstayed privilege leave by one day in August 1874.
121	Nov. 1, 1863	July 21, 1883	17 5 19	Mysore Topographical Survey	Suspension, from 11th May to 6th June 1883.
122	Jan. 11, 1856	June 1, 1874	26 10 23e	On duty at Head Quarters, Calcutta	(e) Inclusive of 2 years, which count as service out of 4 years and 28 days on medical certificate under old rules.

General Alphabetical List of the Officers of the Junior or Subordinate Department

1	2	3	4	5	6	7
Number.	Names of Officers and Branch to which originally posted.	Passed in Vernacular.	Age.	Rank.	Grade.	Salary.
			Y. M. D.			R a. p.
123	Torrens, Mr. C. P. . . . [G. T. S.] . . .		33 6 12	Assistant Surveyor . . .	1st grade . . .	250 0 0
124	VanderBeck, Mr. G. . . . [Topogl.] . . .	L. S.	35 3 15	Ditto . . .	Ditto . . .	210 0 0
125	Vyall, Mr. W. R. . . . [Rev.] . . .		46 0 2	Surveyor . . .	3rd grade . . .	
126	Wainright, Mr. E. A. . . . [Topogl.] . . .		36 6 23	Assistant Surveyor . . .	1st grade . . .	260 0 0
127	Warde, Mr. F. E. . . .		33 3 24	Ditto . . .	3rd grade . . .	120 0 0
128	Warwick, Mr. R. F. . . . [G. T. S.] . . .	L. S.	29 9 6	Ditto . . .	2nd grade . . .	160 0 0
129	White, Mr. P. . . . [Topogl.] . . .	L. S.	34 2 23	Ditto . . .	1st grade . . .	200 0 0
130	Willis, Mr. G. S. . . . *		20 6 4	Ditto . . .	3rd grade . . .	128 0 0
131	Wilson, Mr. A. J. . . . [Topogl.] . . .	L. S.	42 4 0	Surveyor . . .	1st grade . . .	500 0 0
132	Wilson, Mr. B. M. . . . [Rev.] . . .		36 8 17	Assistant Surveyor . . .	2nd grade . . .	184 0 0
133	Wilson, Mr. C. W. . . . [Rev.] . . .	L. S.	39 1 22	Ditto . . .	1st grade . . .	250 0 0
134	Wilson, Mr. J. H. . . . [Topogl.] . . .	L. S.	38 6 23	Ditto . . .	Ditto . . .	250 0 0
135	Wilson, Mr. W. A. . . . [Rev.] . . .	L. S.	41 7 12	Surveyor . . .	2nd grade . . .	400 0 0
136	Wood, Mr. C. . . . [G. T. S.] . . .	L. S.	42 5 10	Ditto . . .	1st grade . . .	500 0 0
137	Wood, Mr. C. G. S. . . . *	L. S.	16 6 0	Assistant Surveyor . . .	3rd grade . . .	120 0 0
138	Wyatt, Mr. A. G. . . . [Topogl.] . . .		39 10 6	Surveyor . . .	Ditto . . .	350 0 0

* Joined the Department after the amalgamation on 1st January 1878.

of the Survey of India as it stood on the 1st January 1885 —concluded.

8	9	10	11	12	
Number.	Date of first appointment to Department.	Date of appointment to present grade.	Period of service counting for pension on 1st January 1885.	Present Post.	REMARKS.
			Y. M. D.		
123	Dec. 12, 1868	April 1, 1881	11 6 12	Burma Topogl. Survey, Rangoon.	
124	July 1, 1872	April 30, 1883	13 3 15	Bhopal and Malwa Topogl. Survey	Apprentice Draftsman, from 11th October 1870 to 30th July 1872.
125	June 13, 1856	Jan. 23, 1883	27 1 18	On furlough	For 2 years, from 1st August 1883.
126	May 1, 1866	July 13, 1878	14 6 13	Mirzapur Topogl. Survey.	
127	Nov. 13, 1884 ^a	Nov. 13, 1884	0 1 19	Dehra Dun District [Cadastral] Survey, N.-W. P.	(a) Date of re-appointment.
128	July 2, 1875	Mar. 1, 1884	5 7 29 ^b	Mirzapur Topogl. Survey	(b) Exclusive of leave on medical certificate for 2 months, from 10th October to 8th December 1877. Also for 6 months, from 1st May to 31st October 1879. Also 4 months and 25 days from 30th August 1881. Also from 16th August 1882 to 14th August 1883.
129	Oct. 1, 1872	Oct. 1, 1884	10 0 15 ^c	South Deccan Topogl. Survey, Bombay Presidency.	(c) Exclusive of sick leave for 3 months, from 21st October 1879. Leave extended for 3 months; further extension of leave without pay up to 17th August 1879. On half-pay list from 18th August 1879 to 31st August 1880. On sick leave for 1 year, from 17th October 1881. Extension to 28th January 1883. On sick leave for 3 months from 5th Nov. 1883 to 4th February 1884.
130	Feb. 25, 1883	Feb. 25, 1883	. . . .	Akyab District [Cadastral] Survey, British Burma.	
131	Oct. 1, 1860	June 2, 1884	24 6 0	Central India and Rajputana Topogl. Survey.	Apprentice Draftsman, from 1st January 1860.
132	Nov. 15, 1872	April 1, 1881	12 11 0	On duty at Head Quarters, Calcutta	Apprentice, from 1st February to 14th November 1872.
133	June 21, 1867 ^d	April 1, 1881	16 8 22	Ferozepur and Jullundur Districts Survey, Punjab.	(d) Commencement of second service. Sick leave for 3 months, from 1st March 1869, and 2 months, from 1st August 1869.
134	April 1, 1868 ^e	April 1, 1881	16 4 23 ^f	Burma Topogl. Survey, Rangoon	(e) Commencement of second service. (f) Exclusive of 2 months' sick leave, from 1st July 1869. Appointed as Draftsman from 16th May 1869.
135	Jan. 1, 1861	Nov. 1, 1883	24 0 0	In charge Dehra Dun District [Cadastral] Survey, N.-W. P.	
136	May 6, 1858	April 1, 1883	24 5 10 ^g	Trigonometrical Branch Office, Dehra Dun.	(g) Service reckoned under old rules.
137	Aug. 2, 1884	Aug. 2, 1884	. . . .	Ditto ditto.	
138	Nov. 1, 1861	Feb. 22, 1883	22 2 6	On duty at Head Quarters, Calcutta	Furlough from 11th November 1868 to 6th November 1884.

List of Technical and Ministerial Officers of the Survey of India Department, as it stood on 1st January 1885.

Names.	Age.	Designation.	Salary.	Date of appointment in Government service.	Date of appointment to present pay or of Surveyors to S. I. Offices.	REMARKS.
SURVEY OF INDIA OFFICES.						
Mr. T. W. Babonau	40 10 7	Registrar	500 0 0	Aug. 9, 1861	April 1, 1884	Short drawn Rs. 60.
SURVEYOR GENERAL'S OFFICES.						
<i>Correspondence Section.</i>						
Mr. M. Francis	47 10 18	Head Clerk	250 0 0	Jan. 13, 1855	Aug. 1, 1884	
Babu Bauee Madhub Banerjee	40 9 0	Clerk	125 0 0	Mar. 20, 1868	Aug. 1, 1884	Short drawn Rs. 10.
<i>Account Section.</i>						
Mr. E. D. Algar	32 8 13	Accountant	150 0 0	Dec. 30, 1878	Aug. 1, 1884	Short drawn Rs. 20.
<i>General Section.</i>						
Mr. T. E. Ware	38 7 1	Clerk	175 0 0	Sep. 21, 1871	Aug. 1, 1884	
J. A. Vallis	36 4 21	Do.	160 0 0	April 1, 1871	Aug. 1, 1884	Short drawn Rs. 6.
REVENUE SURVEY BRANCH OFFICE.						
Mr. A. C. Cunningham	51 2 1	Head Clerk	300 0 0	Sep. 15, 1852	Mar. 1, 1871	
Babu Kali Podo Banerjee	45 2 4	Clerk	125 0 0	Jan. 1, 1859	Aug. 1, 1884	Short drawn Rs. 10.
TOPOGRAPHICAL SURVEY BRANCH OFFICE.						
Mr. F. A. D'Rozario	35 5 28	Head Clerk	200 0 0	Oct. 14, 1874	Dec. 1, 1881	
Babu Doorga Narain Ghose	38 1 0	Clerk	100 0 0	April 5, 1869	Aug. 1, 1884	Short drawn Rs. 6.
MAP RECORD AND ISSUE OFFICE.						
Mr. A. E. Byrn	47 1 0	Head Assistant	300 0 0	Oct. 9, 1854	Jan. 1, 1874	
P. C. H. Smart	29 3 14	Personal allowance. Map Curator	225 0 0	April 18, 1878	Mar. 15, 1884	Short drawn Rs.
H. R. Vallis	34 10 12	Store-keeper	100 0 0	Mar. 5, 1869	Aug. 1, 1884	
DRAWING OFFICE.						
Mr. G. A. McGill		Chief Draftsman	600 0 0			} See page 33.
S. M. Smylie		Head ditto	450 0 0			
R. C. D. Ewing		Draftsman	325 0 0			
EUROPEAN DRAFTSMEN.						
Mr. W. Green	46 3 20	Draftsman	250 0 0	Jan. 1, 1862	Sep. 1, 1874	
J. R. Adels	37 4 0	Ditto	200 0 0	Mar. 23, 1866	Sep. 1, 1874	
A. J. Muegrove	26 10 10	Ditto	150 0 0	April 22, 1877	Dec. 1, 1883	Short drawn Rs. 20.
R. Sinclair	23 0 20	Ditto	100 0 0	June 1, 1880	Dec. 1, 1883	
W. P. Smith	23 5 5	Ditto	100 0 0	Nov. 21, 1878	Dec. 1, 1883	Short drawn Rs. 15.
NATIVE DRAFTSMEN.						
Munshce Sonallah	50 9 7	Draftsman	160 0 0	Mar. 31, 1854	Jan. 1, 1874	
Nabi Baksh	45 0 0	Ditto	150 0 0	Mar. 1, 1859	Feb. 1, 1875	
Babu Hari Hur Sen	53 0 12	Ditto	125 0 0	Feb. 5, 1857	May 1, 1876	
Mohesh Chunder Shaw	45 0 25	Ditto	100 0 0	Dec. 1, 1856	May 1, 1880	

List of Technical and Ministerial Officers of the Survey of India Department, as it stood on 1st January 1885—continued.

Names.	Age.	Designation.	Salary.	Date of appointment in Government service.	Date of appointment to present pay or of Surveyors to S. I. Offices.	REMARKS.
ADDITIONAL ESTABLISHMENT, DRAWING OFFICE.						
Mr. W. Stotesbury		Draftsman	400 0 0			Short drawn Rs. 50.
P. J. W. Doran		Do.	300 0 0			See page 33.
ENGRAVING OFFICE.						
Mr. C. W. Coard	54 2 2	Superintendent of Engravers.	1,000 0 0	Nov. 4, 1868	Feb. 1, 1884	Exclusive of house-rent Rs. 100 per mensem. Short drawn Rs. 50.
W. Donaldson	44 1 23	2nd Engraver	700 0 0	Nov. 6, 1868	Jan. 1, 1884	
G. G. Palmer	54 11 9	3rd Do.	550 0 0	Sept. 5, 1872	Dec. 1, 1882	Exclusive of house-rent Rs. 50.
D. L. Mitchell	44 1 5	4th Do.		Sept. 21, 1872	Jan. 1, 1884	On furlough.
J. Fulford	41 5 26	5th Do.	450 0 0	Oct. 10, 1872	Jan. 1, 1885	Exclusive of house-rent Rs. 50. Short drawn Rs. 30.
T. B. Rodger	33 3 24	6th Do.	350 0 0	Aug. 20, 1872	Aug. 1, 1884	Exclusive of house-rent Rs. 50.
A. G. Palmer	31 4 1	7th Do.		April 1, 1874	May 1, 1880	On furlough.
S. M. Coard	26 4 11	8th Do.	250 0 0	Feb. 1, 1875	May 1, 1884	Short drawn Rs. 10.
A. W. N. James	24 11 11	9th Do.	200 0 0	March 15, 1878	Aug. 1, 1884	Short drawn Rs. 20.
A. R. Coard	23 2 29	10th Do.	150 0 0	March 15, 1878	April 1, 1884	Short drawn Rs. 10.
A. Chamarette	21 7 26	11th Do.	100 0 0	March 15, 1878	April 1, 1882	
E. C. Ollenbach	23 11 8	12th Do.	100 0 0	Aug. 1, 1879	Aug. 1, 1882	
W. T. Collins	26 2 1	Copper-plate Printer.	150 0 0	Jan. 6, 1880	May 1, 1884	
Babu Russic Lall Roy	50 5 20	1st Native Engraver.	125 0 0	Sept. 1, 1869	Sept. 1, 1877	
Joy Kristo Shaw	36 2 28	2nd Do. ...		Aug. 1, 1869	Aug. 1, 1883	On medical leave for one month.
LITHOGRAPHIC OFFICE.						
Mr. H. L. Lepago	41 7 5	Head Assistant	450 0 0	July 15, 1871	Dec. 1, 1881	
L. C. Cunningham	31 4 13	Draftsman	325 0 0	Aug. 9, 1863	Aug. 9, 1884	
D. Dens	29 3 21	Lithographic Printer.	260 0 0	Nov. 29, 1863	Nov. 29, 1884	
E. D'Pyvah	34 9 16	Head Do.	100 0 0	Aug. 1, 1866	Nov. 1, 1884	
MATHEMATICAL INSTRUMENT OFFICE.						
WORKSHOP BRANCH.						
Mr. T. Bolton	39 11 21	Mathematical Instrument-maker.	750 0 0	Sept. 16, 1867	Nov. 11, 1879	
F. Marshall	29 11 23	Assistant Mathematical Instrument-maker.	500 0 0	Jan. 3, 1881	Jan. 3, 1884	Short drawn Rs. 75.
CORRESPONDENCE BRANCH.						
Mr. M. O'Brien	53 0 0	Head Clerk	200 0 0	March 10, 1859	March 1, 1872	
L. G. Fink	18 8 0	Offg. 2nd Clerk	100 0 0	Oct. 8, 1884	Oct. 8, 1884	Short drawn Rs. 25.
STORE BRANCH.						
Mr. C. O. Gray	23 10 14	Offg. Store-keeper	200 0 0	Feb. 4, 1879	Sept. 21, 1884	Short drawn Rs. 50.

List of Technical and Ministerial Officers of the Survey of India Department, as it stood on 1st January 1885—continued.

Names.	Age.	Designation.	Salary.	Date of appointment in Government service.	Date of appointment to present pay or of Surveyors to S. I. Offices.	REMARKS.
PHOTOGRAPHIC OFFICE.						
<i>NORMAL ESTABLISHMENT.</i>						
<i>Negative Section.</i>						
Mr. J. Mackenzie	47 6 1	Photographer	330 0 0	June 1, 1862	June 1, 1874	
<i>Photo. Transfer Printing Section.</i>						
Mr. J. Harrold	49 7 8	Ditto	330 0 0	Mar. 19, 1873	Mar. 11, 1880	
<i>Silver Printing Section.</i>						
Mr. G. G. Dempster	32 0 25	Ditto	200 0 0	July 16, 1873	April 1, 1884	
<i>Heliogravure and Collotype Section.</i>						
Vacant		Draftsman and Engraver.	100 0 0			
<i>Zinc Printing Section.</i>						
Mr. B. Mackenzie	43 10 7	Zincographer	330 0 0	Nov. 24, 1867	Nov. 24, 1879	
<i>General Office Establishment.</i>						
Mr. W. Moore	26 1 27	Store-keeper	100 0 0			
CADASTRAL ESTABLISHMENT.						
<i>Negative Section.</i>						
Mr. C. Marshall	49 5 11	Photographer	200 0 0	Mar. 20, 1874	April 1, 1883	
" L. Lagnier	34 6 0	Ditto	200 0 0	Feb. 1, 1876	Feb. 1, 1881	
" T. Lloyd	30 1 24	Ditto	100 0 0	July 16, 1873	July 1, 1881	
<i>Photo. Transfer Printing Section.</i>						
Mr. R. George	38 7 27	Photographer	250 0 0	Feb. 1, 1876	Feb. 1, 1884	
<i>Zinc Printing Section.</i>						
Mr. J. Watson	50 2 17	Zincographer	330 0 0	Nov. 24, 1867	Mar. 1, 1880	
" E. A. LeFranc	28 0 20	Ditto	200 0 0	Nov. 15, 1876	Jan. 1, 1883	
<i>General Office Establishment.</i>						
Mr. H. Haward	34 10 20	Head Assistant	350 0 0	Nov. 16, 1883	Nov. 16, 1883	
TRIGONOMETRICAL BRANCH OFFICE.						
<i>Computing Section.</i>						
Babu Ganga Pershad	44 0 0	Computer	240 0 0	Mar. 13, 1857	Feb. 1, 1883	
" Cally Mohan Ghose	41 8 0	Ditto	200 0 0	Nov. 6, 1865	Feb. 1, 1883	
" Cally Coomar Chatterjee	42 8 0	Ditto	120 0 0	Aug. 12, 1865	Feb. 1, 1883	
" Tarapado Mukerjee	45 7 0	Ditto	100 0 0	May 21, 1862	Feb. 1, 1883	
" Amba Pershad	42 5 16	Ditto	100 0 0	July 26, 1865	Feb. 1, 1883	
" Umbica Churan Shome	41 5 16	Ditto	100 0 0	Feb. 8, 1867(a)	Feb. 1, 1883	
<i>Photozinc. Section.</i>						
Mr. C. G. Ollenbach	63 11 13	Zincographer	300 0 0	Jan. 1, 1850(b)	Feb. 1, 1883	
" C. G. Dyson	42 6 0	Asst. do	100 0 0	Feb. 26, 1866	Feb. 1, 1883	
<i>Printing Section.</i>						
Mr. B. V. Hughes	45 0 30	Printer	220 0 0	Nov. 1, 1880(c)	Aug. 1, 1884	

(a) Date of appointment to Educational Department. Joined Computing Office, Survey of India, 10th April 1868.

(b) Appointed to Survey of India, 1st November 1865.

(c) Date of appointment to Survey of India. Previous Military service excluded.

Disposition list of Officers attached to the Head Quarters Offices, as it stood on 1st January 1885.

Officers in charge.	Rank and Grade.	Date of assuming charge.	REMARKS.
Bt. Colonel G. C. DePrée, s.c.	Surveyor General of India.	Feb. 12, 1883	
Bt. Lt.-Col. H. R. Thuillier, n.e.	Depty. Surveyor Genl., Offg. in charge Rev. Survey Branch.	Mar. 5, 1884	
Bt. Colonel J. Sconce, s.c.	Depty. Surveyor Genl., in charge Revenue Survey Branch.	Jan. 1, 1879	Furlo. for 2 years from 14th March 1884.
Bt. Colonel C. T. Haig, n.e.	Depty. Superintendent, 1st grade, Offg. Depty. Surveyor General, Offg. in charge Trigonometrical Survey Branch.	Oct. 1, 1884	
Major C. Strahan, n.e.	Depty. Superintendent, 2nd grade, Offg. in 1st grade, and Assistant Surveyor General.	July 24, 1883	In charge Drawing and Engraving Offices.
Lt.-Col. W. H. Wilkins, s.c.	Depty. Superintendent, 3rd grade, offg. in 2nd grade.	Mar. 14, 1884	In charge Map Record and Issue Office.
Major J. Waterhouse, s.c.	Depty. Superintendent, 3rd grade, and Assistant Surveyor General.	Dec. 1866 Apl. 19, 1883	In charge Photo. Office. In charge Litho. Office.
Major M. W. Rogers, n.e.	Depty. Superintendent, 3rd grade, and Assistant Surveyor General.	Apl. 19, 1883	In charge Correspondence Office and Mathl. Instt. Office.
W. H. Cole, Esq., m.a.	Depty. Superintendent, 2nd grade	Feb. 12, 1883	In charge Trigonometrical Survey Branch Office.
G. H. Cooke, Esq.	Asst. Superintendent, 1st grade, Offg. Deputy Superintendent, 4th grade.	Aug. 17, 1884	Offg. Personal Assistant to the Surveyor General.
Lieut. S. G. Burrard, n.e.	Asst. Superintendent, 2nd grade, Offg. in 1st grade.	Sep. 26, 1884	Trigonometrical Branch Office.

Surveyors and Assistant Surveyors attached to Survey of India Offices, Calcutta.

Mr. G. A. McGill	Surveyor, 1st grade, and Chief Draftsman.	Dec. 20, 1882 June 2, 1884	Date of joining, S. I. O. " assuming charge of Dg. Office.
" W. Todd	Ditto, 2nd grade, on duty.	Sept. 1, 1880	
" S. M. Smylie	Ditto ditto, and Head Draftsman	Mar. 12, 1883	Drawing Office.
" F. Adams	Ditto ditto, on duty	June 1, 1877	
" A. G. Wyatt	Ditto, 3rd grade on duty	Nov. 14, 1884	
" W. Stotesbury	Ditto, 4th grade, and draftsman	June 24, 1884 Sept. 1, 1884	Map Record and Issue Office.
" R. C. D. Ewing	Asst. Surveyor, 1st grade, and Draftsman	June 17, 1882 Oct. 25, 1883	
" P. J. W. Doran	Ditto ditto, ditto	Jan. 1, 1885	Drawing Office.
" S. O. Madras	Ditto ditto, on duty	May. 7, 1884	
" E. J. Martin	Ditto ditto, on duty	Dec. 1, 1882	Map Record and Issue Office.
" B. M. Wilson	Ditto, 2nd grade, on duty	Nov. 1, 1882	
" P. C. H. Smart	Ditto ditto, and Map Curator.	Sept. 15, 1883	

Surveyors and Assistant Surveyors attached to Trigonometrical Survey Branch Office, Dehra Dun.

Mr. D. Atkinson	Surveyor, 1st grade, on duty	Oct. 1, 1884	Computing Office.
" C. Wood	Ditto ditto ditto	May 1, 1865	
" L. H. Clarke	Ditto, 2nd grade, ditto	Oct. 1, 1874	Solar Photographer.
" G. W. E. Atkinson	Ditto ditto ditto	Sept. 1, 1870	
" H. W. Psychers	Ditto, 3rd grade, ditto	Sept. 1, 1871	Computing Office.
" W. W. McNair	Ditto, 4th grade on duty	Aug. 17, 1884	
" J. Bond	Ditto, ditto on duty	July 1, 1882	Computing Office.
" C. G. S. Wood	Asst. Surveyor, 3rd grade, on duty	Aug. 12, 1884	
" W. V. Skilling	Ditto ditto ditto	Nov. 24, 1884	Ditto.

Disposition List of the Officers of the Survey

Number of Party.	WHERE EMPLOYED.	STRENGTH OF LOWER SUBORDINATE ESTABLISHMENT IN ALL GRADES.						Annual Cost of Party.
		Sub-Surveyors and Computers.	Writers.	Chainmen and Flagmen.	Native Doctors.	Burkundazes.	Havildars.	
	Secondary Triangulation Party; recess quarters at Mussoorie	No. ...	No. 1	No. 56	No. 1	No. 9	No. ...	R 26,640
<i>Darjeeling Survey.</i>								
	Special Survey Operations in and around Darjeeling; Nepal Boundary Demarcation, recess quarters at Mussoorie	5	1	91	1	13	...	62,272
	Burma Party Temporarily in abeyance	...	...	...	...	...	...	5,600
<i>Kattywar and Cutch Survey.</i>								
	The Province of Kattywar and Cutch, Bombay Presidency; recess quarters at Poona	10	1	120	1	26	...	63,638
<i>Guzerat Survey.</i>								
	Guzerat; recess quarters at Poona	31	4	184	1	33	1	88,260

of India, as it stood on the 1st January 1885.

Officer in charge. Surveyors and Assistant Surveyors.	Rank and Grade.	Date of assum- ing charge.	REMARKS.
A. D'Souza, Esq., (in charge) Mr. C. D. Potter	Asst. Superintendent, 2nd grade. Offg. in 1st grade. Asst. Surveyor, 1st grade. Offg. Sur- veyor, 4th grade.	Oct. 16, 1883.	
Bt. Col. H. C. B. Tanner, s.c. E. C. Ryall, Esq. Mr. J. Peyton " W. J. O'Sullivan " W. Robert " W. C. G. Barclay " R. W. Senior	Depy. Superintendent, 2nd grade Asst. Superintendent, 1st grade. Surveyor, 1st grade. Ditto, 3rd grade. Asst. Surveyor, 1st grade. Ditto ditto. Ditto, 2nd grade.	Nov. 1, 1882.	
Lieut.-Col. A. Pullan, s.c. Mr. N. C. Gwynne " W. A. Fielding " G. T. Hall " H. A. Charrier	Depy. Superintendent, 2nd grade Surveyor, 4th grade. Asst. Surveyor, 1st grade. Ditto, ditto. Ditto, 3rd grade.	Apr. 26, 1879.	
Lieut.-Col. W. F. Badgley, s.c. Lieut. G. B. Hodgson, s.c. Mr. A. Christie " C. H. McA'Fee " C. Tapsell " S. F. Norman " C. Norman " A. George " P. J. Serrao	Depy. Superintendent, 3rd grade, offg. in 2nd grade. Asst. Superintendent, 2nd grade. Offg. in 1st grade. Surveyor, 3rd grade. Ditto, 4th grade. Asst. Surveyor, 1st grade. Ditto, 2nd grade. Ditto ditto. Ditto, ditto. Ditto, 3rd grade.	Mar. 25, 1884.	

Disposition List of the Officers of the Survey

Number of Party.	WHERE EMPLOYED.	STRENGTH OF LOWER SUBORDINATE ESTABLISHMENT IN ALL GRADES.						Annual Cost of Party. R
		Sub-Surveyors and Computers.	Writers.	Chainmen and Flagmen.	Native Doctors.	Barkundazas.	Jemadars.	
	<i>No. 1 Astronomical Party.</i> Carrying on Determinations of Latitude in India; recess quarters at Poona	No. 1	No. 1	No. 14	No. 1	No. 6	No. ...	23,752
	<i>No. 2 Astronomical Party.</i> Carrying on Determinations of Latitude in India; recess quarters at Poona . . . . .	...	1	15	...	6	...	26,487
	<i>Tidal and Levelling Operations.</i> Tidal Operations at various ports in India, Burma, and Ceylon; also at Aden and Port Blair	17	2	64	...	9	...	56,845
	Levelling Operations in Bombay Presidency, &c.; recess quarters at Poona . . . . .	...	...	...	...	...	...	...

of India, as it stood on the 1st January 1885 — continued.

Officer in charge, Surveyors and Assistant Surveyors.	Rank and Grade.	Date of assum- ing charge.	REMARKS.
Major W. J. Heaviside, B.E. Mr. P. F. Prunty	Depty. Superintendent, 2nd grade Asst. Surveyor, 2nd grade.	Dec. 6, 1882.	
Major W. J. Heaviside, B.E.	Depty. Superintendent, 2nd grade	Apr. 30, 1884.	
Major A. W. Baird, B.E. Mr. H. E. T. Keelan " G. Belcham " T. H. Rendell " E. J. Connor	Depty. Superintendent, 4th grade. Offg. in 3rd grade. Surveyor, 1st grade. Ditto, 3rd grade. Ditto, 4th grade. Ditto ditto.	Oct. 1, 1884.	

Disposition List of the Officers of the Survey

Number of Party.	WHERE EMPLOYED.	STRENGTH OF LOWER SUBORDINATE ESTABLISHMENT IN ALL GRADES.						Annual Cost of Party.
		Sub-Surveyors.	Writers.	Flagmen and Carriers.	Hospital Assistants.	Bunkundazes.	Apothecary.	
		No.	No.	No.	No.	No.	No.	R
1	<i>The Central India and Rajputana Topographical Survey Party.</i> Native States in Rajputana Agency; recess quarters at Mussoorie	8	1	124	1	23	...	80,000
2	<i>Bhopal and Malwa Topographical Party.</i> Bhopal and Malwa Survey; recess quarters at Poona	9	2	103	1	18	...	51,000
3	Baluchistan Topographical Party; recess quarters at Mussoorie	9	1	56	1	...	...	91,000
4	Andaman Topographical Party; recess quarters at Mussoorie	4	1	96	...	4	...	31,000

of India, as it stood on the 1st January 1885—continued.

Officers in charge. Surveyors and Assistant Surveyors.	Rank and Grade.	Date of assuming charge.	REMARKS.
Major R. Beavan, s.c., (in charge)	Depy. Superintendent, 4th grade	Oct. 1, 1883.	
Lieut. W. H. Pollen, B.E.	Asst. Superintendent, 2nd grade. Offg. in 1st grade.		
Mr. A. J. Wilson	Surveyor, 1st grade.		
" W. J. Cornelius	Asst. Surveyor, 1st grade.		
" G. P. Tate	Ditto, 2nd grade.		
" M. Gastaud	Ditto, 3rd grade.		
" P. Beechey	Ditto ditto.		
W. H. Patterson, Esq., (in charge)	Asst. Superintendent, 1st grade	Nov. 21, 1884.	
Mr. J. A. May	Surveyor, 2nd grade.		
" G. VanderBeck	Asst. Surveyor, 1st grade.		
" C. George	Ditto, 2nd grade.		
" J. A. Higgs	Ditto, 3rd grade.		
Lieut. R. A. Wabab, n.e., (in charge)	Asst. Superintendent, 1st grade	Dec. 17, 1884.	
Mr. G. B. Scott	Ditto, 2nd grade. Offg. in 1st grade.		
" T. E. M. Claudius	Surveyor, 4th grade.		
" A. Kitchen	Asst. Surveyor, 1st grade.		
Capt. J. R. Hobday, s.c., (in charge)	Asst. Supdt., 1st grade. Offg. Depy. Superintendent, 4th grade.	Nov. 1, 1883.	
Mr. G. D. Cusson	Asst. Surveyor, 1st grade.		
" J. Keating	Ditto, 2nd grade.		
" D. Campbell	Ditto ditto.		

Disposition List of the Officers of the Survey

of India, as it stood on the 1st January 1885 — continued.

Number of Party.	WHERE EMPLOYED.	STRENGTH OF LOWER SUBORDINATE ESTABLISHMENT IN ALL GRADES.						Annual Cost of Party.
		Sub-Surveyors.	Writers.	Flagmen and Carriers.	Hospital Assistants.	Burundees and Feons.	Apothecary.	
5	<i>The Mirzapur Topographical Survey Party.</i> Mirzapur District forest tracts; recess quarters at Mussoorie	No. 20	No. ...	No. 267	No. 1	No. 10	No. ...	R 58,000
6	<i>North-East Frontier Topographical Party.</i> North-Eastern Frontier, Assam and South Sylhet; recess quarters at Shillong	2	1	76	1	7	...	82,000
7	<i>Burma Topographical Party.</i> Forest tracts in Districts Hanthawaddy and Tharrawaddy, British Burmah; recess quarters at Rangoon	24	3	548	1	11	1	1,05,000
8	<i>Mysore Topographical Party.</i> Mysore; recess quarters at Bangalore	10	1	200	1	57	...	91,000

Officers in charge, Surveyors and Assistant Surveyors.	Rank and Grade.	Date of assuming charge.	REMARKS.
Major J. R. Wilmer, s.c., (in charge) Mr. C. F. Hamer " E. A. Wainright " H. T. Kitchen " W. H. Lilley " R. F. Warwick	Depy. Superintendent, 4th grade. Offg. in 3rd grade. Surveyor, 4th grade. Asst. Surveyor, 1st grade. Ditto ditto. Ditto ditto. Ditto, 2nd grade.	Oct 12, 1874.	
Bt. Lieut.-Col. R.G. Woodthorpe, s.E., (in charge). Mr. M. J. Ogle " A. Ewing	Depy. Superintendent, 4th grade. Surveyor, 3rd grade. Assistant Surveyor, 3rd grade.	Dec. 3, 1881.	
H. Hörst, Esq., (in charge) Mr. J. H. Wilson " C. P. Torrens " W. H. Penrose " R. A. Gibson " E. Graham	Depy. Superintendent, 3rd grade. Asst. Surveyor, 1st grade. Ditto ditto. Ditto ditto. Ditto ditto. Ditto 2nd grade.	Dec. 14, 1882.	
Major J. R. McCullagh, s.E., (in charge) Lieut. H. M. Jackson, s.E. Mr. E. S. P. Atkinson " L. J. Pocock " A. J. James " F. Kitchen " Hugh Todd " J. A. Barker " R. Todd " J. M. Kennedy " T. J. J. Mills	Depy. Superintendent, 4th grade. Offg. in 3rd grade. Asst. Superintendent, 1st grade. Surveyor, 3rd grade Ditto ditto. Ditto, 4th grade. Ditto ditto. Ditto ditto. Assistant Surveyor, 1st grade. Ditto ditto. Ditto, 2nd grade. Ditto, 3rd grade.	Mar. 20, 1884.	Temporarily detached under Settlement officer, Rawli Pindi, Punjab.

Disposition List of the Officers of the Survey

Number of Party, Revenue Branch.	WHERE EMPLOYED.	STRENGTH OF LOWER SUBORDINATE ESTABLISHMENT IN ALL GRADES.						Annual Cost of Party. R
		Sub-Surveyors, &c.	Writers.	Levelers.	Tindals, Mea- surers, &c.	Hospital Assist- ants.	Barkundazes.	
1	Ferozepur and Jullundur Districts, Punjab (Temporary) Recess quarters at Simla.	No. 28 ...	No. 1 ...	No.	No. 64 159	No. 1 ...	No. 13 ...	57,425 2,000
2	Shuaygheen District, British Burma— Professional Establishment (permanent) Recess quarters at Rangoon.	33	1	...	120	1	21	1,48,678
3	Ajmere and Mhairwara Districts, Rajpootana Recess quarters at Mussoorie.	40	1	...	345	1	14	54,828
4	Basti District, North-Western Provinces— Professional Establishment (permanent) Cadastral do. (temporary) Recess quarters at Naini Tal.	24 312	1 ...	...	461 557	1 ...	17 ...	1,26,688
5	Gorukpur District, North-Western Provinces— Professional Establishment (permanent) Cadastral do. (temporary) Recess quarters at Naini Tal.	18 359	2 ...	...	264 502	1 ...	20 ...	1,27,144
6	Kamrup District, Assam— Professional Establishment (permanent) Cadastral do. (temporary) Recess quarters at Shillong.	27 149	1 ...	...	230 244	1 ...	14 ...	1,30,549

of India, as it stood on the 1st January 1885—continued.

Officers in charge, Surveyors and Assistant Surveyors.	Rank and Grade.	Date of assum- ing charge.	REMARKS.
Lt.-Colonel F. Coddington, s.c., (in charge) Mr. J. Toad " W. S. Buttress " C. W. Wilson " G. Campbell " E. B. M. Drew " J. P. Barker	Depy. Superintendent, 2nd grade. Offg. in 1st grade. Surveyor, 2nd grade. Ditto, 3rd grade. Asst. Surveyor, 1st grade. Ditto ditto. Ditto, 2nd grade. Ditto, 3rd grade.	Mar. 3, 1884.	
E. J. Jackson, Esq., (in charge) Mr. F. Grant " H. Downman " J. McHutton " G. E. Parker " P. A. Peters	Asst. Superintendent, 1st grade. Offg. Depy. Superintendent, 4th grade. Surveyor, 1st grade. Ditto, 3rd grade. Asst. Surveyor, 1st grade. Ditto ditto. Ditto, 2nd grade.	Feb. 20, 1884.	
Major E. H. Steel (in charge) Mr. A. J. Gibson " C. W. F. Seyers " F. W. Moore " T. W. Babonau (jr.)	Depy. Superintendent, 4th grade Surveyor, 3rd grade. Asst. Surveyor, 1st grade. Ditto, 3rd grade. Ditto ditto.	Aug. 7, 1884.	
Major S. H. Cowan, s.c., (in charge) Mr. J. S. Pemberton " H. T. Hanby " W. C. Price " E. P. S. Hill " L. F. Berkeley " B. R. Hughes " W. E. Johnson	Depy. Superintendent, 4th grade Offg. in 3rd grade. Surveyor, 2nd grade. Ditto, 3rd grade. Ditto, 4th grade. Asst. Surveyor, 1st grade. Ditto, 2nd grade. Ditto, 3rd grade Ditto ditto.	Dec. 11, 1883.	
Major J. E. Sandeman, s.c., (in charge) Lieut. F. B. Longe, R.E. Mr. E. G. Little " T. F. Freeman " T. Shaw " J. Murphy " O. D. Smart " N. Bedford	Depy. Superintendent, 3rd grade. Offg. in 2nd grade. Asst. Superintendent, 1st grade Offg. Dy. Supt., 4th grade. Surveyor, 3rd grade. Asst. Surveyor, 1st grade. Ditto ditto. Ditto ditto. Ditto, 3rd grade. Ditto ditto.	Nov. 1, 1883.	
E. C. Barrett, Esq., (in charge) Mr. J. H. O'Donel " D. A. King " J. Connor " C. S. Kraal " J. C. Kelly " J. Smith	Depy. Superintendent, 4th grade Surveyor, 4th grade. Ditto ditto. Ditto ditto. Asst. Surveyor, 2nd grade. Ditto ditto. Ditto, 3rd grade.	July 25, 1883.	

Disposition List of the Officers of the Survey

Number of Party, Revenue Branch.	WHERE EMPLOYED.	STRENGTH OF LOWER SUBORDINATE ESTABLISHMENT IN ALL GRADES.						Annual Cost of Party. R
		Sub-Surveyors, &c.	Writers.	Levelers.	Tindals, Measur- ers, &c.	Hospital Assist- ants.	Burkundazes.	
		No.	No.	No.	No.	No.	No.	
7	Akyab District, British Burma—							1,83,361
	Professional Establishment (permanent)	22	1	...	170	1	15	
	Cadastral do. (temporary)	100	...	...	450	...	...
	Recess quarters at Akyab.							
8	Henzada District, British Burma—							1,70,000
	Professional Establishment (permanent)	18	1	...	130	1	22	
	Cadastral do. (temporary)	144	...	...	630	...	...
	Levelling do. . . . .	...	1	2	40	...	...
	Recess quarters at Rangoon.							
10	Thana District, Konkan, Bombay Presidency	16	1	...	225	1	14	51,704
	(Temporary)	4	1	...	...	...	...
	Recess quarters at Poona.							
11	South Deccan Districts (Satara and others), Bombay Presidency	19	1	...	182	1	9	51,540
	Recess quarters at Poona.							
Detachments from Nos. 3, 4 and 1, Revenue parties.	Chhattisgarh Division, Central Provinces—							33,801
	Professional Establishment (permanent)	10	...	...	107	...	5	
	Cadastral do. (temporary)	38	...	...	56	...	...
	Recess quarters at Nagpur.							
Detachments from Nos. 3, 4 and 1, Revenue parties.	Dehra Dun District, North-Western Provinces—							42,064
	Professional Establishment (permanent)	2	...	...	40	...	4	
	Cadastral do. (temporary)	47	...	...	100	...	...
	Recess quarters at Mussoorie.							
Detachments from Nos. 3, 4 and 1, Revenue parties.	Raipur Instruction Party (Professional) (Cadastral)	1	1	...	48 41	...	4	6,842
	Recess quarters at Nagpur.							

of India, as it stood on the 1st January 1885—concluded.

Officers in charge, Surveyors and Assistant Surveyors.	Rank and Grade.	Date of assum- ing charge.	REMARKS.
H. B. Talbot, Esq., (in charge)	Depy. Superintendent, 4th grade. Offg. in 3rd grade.	Nov. 1, 1880.	
F. W. Kelly, Esq.	Asst. Superintendent, 1st grade.		
Mr. G. W. Jarbo	Asst. Surveyor, 1st grade.		
" J. R. Scott	Ditto ditto.		
" J. S. Swiney	Ditto ditto.		
" A. W. Smart	Ditto ditto.		
" G. S. Willis	Ditto, 3rd grade.		
Major H. S. Hutchinson, s.c., (in charge)	Depy. Superintendent, 4th grade. Surveyor, 2nd grade.	May 29, 1883.	
Mr. H. R. Littlewood	Ditto, 4th grade.		
" R. B. Smart	Ditto ditto.		
" T. H. Dunne	Asst. Surveyor, 2nd grade.		
" W. H. D. Ewing			
Major J. Hill, n.e., (in charge)	Depy. Superintendent, 3rd grade. Surveyor, 2nd grade.	Oct. 2, 1884.	
Mr. A. M. Lawson	Asst. Surveyor, 1st grade.		
" J. Newland	Ditto ditto.		
" W. M. Kelly	Ditto ditto.		
" R. R. Dickinson			
Major D. C. Andrew, s.c., (in charge)	Depy. Superintendent, 3rd grade. Offg. in 2nd grade.	Dec. 24, 1880.	
Mr. J. T. U. Coxen	Surveyor, 4th grade.		
" J. Hickie	Asst. Surveyor, 1st grade.		
" P. White	Ditto ditto.		
" G. A. Knight	Ditto, 2nd grade.		
Mr. P. A. G. Cowley (in charge)	Surveyor, 1st grade.	Oct. 10, 1883.	
" G. C. Swiney	Asst. Surveyor, 1st grade.		
" E. F. Berkeley	Ditto, 3rd grade.		
Mr. W. A. Wilson (in charge)	Surveyor, 2nd grade.	Oct. 1, 1883.	Under the superintendence of Major E. H. Steel, s.c., Depy. Superintend- ent, 4th grade.
" F. E. Warde	Asst. Surveyor, 3rd grade.		
Mr. A. D. Smart (in charge)	Surveyor, 3rd grade.	Oct. 26, 1883.	

Classified List of Officers of the Mysore Revenue

Number.	NAMES.	Substantive Appointment.	Duty in which at present employed.
1	2	3	4
1	Lieut.-Col. J. P. Grant	Superintendent, Revenue Survey and Settlement.	Superintendent, Revenue Survey and Settlement.
1	Major J. Rutherford	Deputy Superintendent, Revenue Survey.	Deputy Superintendent, Revenue Survey.
1	Mr. E. H. Butcher	Assistant Settlement Officer	Assistant Superintendent
2	Lieut.-Col. G. Mackenzie	Ditto ditto	Ditto
<i>1st Grade Assistants.</i>			
1	Mr. J. P. Barker	Assistant Superintendent	Assistant Superintendent
2	„ F. B. Clerk	Ditto	Ditto
3	Major D. Cowie	Ditto	Ditto
<i>2nd Grade Assistant.</i>			
1	Mr. A. G. Hudson	Assistant Superintendent	Assistant Superintendent
<i>3rd Grade Assistant.</i>			
1	Mr. E. W. Laseron	Assistant Superintendent	Assistant Superintendent
<i>Local 3rd Grade Assistant.</i>			
1	Mr. M. S. Narain Rao	Assistant Superintendent	Assistant Superintendent

General List of Officers of the Mysore Revenue

Genl. Seniority Number.	NAME.	Passed in the Vernacular.	Age.	Rank.	Grade.	Salary.
1	2	3	4	5	6	7
			Y. M. D.			R a. p.
1	Lieut.-Col. J. P. Grant	All have passed in the Vernacular.	46 9 0	Superintendent, Revenue Survey and Settlement.		1,527 14 0
2	Major J. Rutherford		42 11 22	Deputy Superintendent, Revenue Survey.		860 0 0
3	Mr. E. H. Butcher		48 6 2	Assistant Settlement Officer	1st Grade Asst.	760 0 0
4	„ J. P. Barker		37 3 16	Assistant Superintendent	Ditto	660 0 0
6	„ F. B. Clerk		40 4 13	Ditto	Ditto	660 0 0
6	Major D. Cowie		44 0 15	Ditto	Ditto	660 0 0
7	Lieut.-Col. G. Mackenzie		43 5 28	Assistant Settlement Officer	Ditto	827 14 0
8	Mr. A. G. Hudson		26 8 2	Assistant Superintendent	2nd Grade Asst.	560 0 0
9	„ E. W. Laseron		40 8 7	Ditto	3rd Grade Asst.	455 0 0
10	„ M. S. Narain Rao		36 5 24	Ditto	Local 3rd Grade	200 0 0

Notes.—In this list the officers have been arranged according to their length of service in the Department, the officer who has been longest in the Department standing first

Survey Department on the 1st January 1885.

SALARIES INCLUDING ALLOWANCES				REMARKS.
TO MILITARY OFFICERS.			TO CIVILIANS.	
Military Pay and Allowances.	Staff Pay.	Aggregate Pay and Allowances.	Civil Consolidated Salary.	
5	6	7	8	9
		R a. p.	R a. p.	
		1,752 14 0	.....
		995 0 0	.....
		895 0 0	
		962 14 0	.....
		795 0 0	
		795 0 0	
		795 0 0	.....
		695 0 0	
		
		305 0 0	Left this Department on the 1st November 1884, having been granted a compensation pension. Dewan's Notification No. 115, dated 16th August 1884.

Survey Department on the 1st January 1885.

8	9	10	11	12
Date of first appointment to the Department.	Date of appointment to present grade.	* Period of service counting for pension.	Present post.	REMARKS.
		Y. M. D.		
Nov. 1, 1863	Jan. 16, 1868	...	Superintendent, Revenue Survey and Settlement.	
Jan. 25, 1865	April 8, 1881	...	Deputy Superintendent, Revenue Survey.	
Oct. 2, 1865	April 1, 1881	19 2 29	Assistant Superintendent.	
Dec. 22, 1866	Dec. 5, 1878	15 3 2	Ditto.	
Jan. 16, 1868	Nov. 26, 1880	16 11 5	Ditto.	
Dec. 3, 1870	Feb. 8, 1882	...	Ditto.	
Dec. 24, 1871	Oct. 24, 1883	...	Ditto.	
Nov. 23, 1876	Jan. 1, 1884	4 8 2	Ditto.	
Mar. 22, 1877	April 24, 1881	15 8 0	Ditto	Having been granted a compensation pension retired.
Nov. 30, 1882	Aug. 1, 1884	14 5 24	Ditto	Vide Dewan's Notification No. 115 dated 16th August 1884.

the Unconvenanted Civil Service Rules. Their dates of first appointment to the Department (column 8), and period of service counting for pension (column 10) have been arranged in consecutive order.

Disposition List of Officers of the Mysore Revenue

Number of Party.	Where employed.	STRENGTH OF SUBORDINATE ESTABLISHMENTS IN ALL GRADES.							Annual cost of Party from 1st January 1884 to 31st December 1884.
		Sub-Surveyors.	English Clerks.	Karkuns.	Learners.	Mappers.	Peons.	Pressmen.	
1	2	3	4	5	6	7	8	9	10
		No.	No.	No.	No.	No.	No.	No.	₹
1	Mysore Province	13	2	52	12	15	9	6	48,628
2	Ditto . . . . .	...	2	9	...	...	4	...	19,784
3	Kolar District	34	...	3	3	...	2	...	17,090
4	Bangalore and Kolar Districts	33	...	3	4	...	2	...	21,053
5	Mysore District	31	...	3	4	...	2	...	19,443
6	Kadur and Mysore District	31	...	3	3	...	2	...	21,066
7	Mysore District	34	...	3	5	...	2	...	19,031
8	Ditto ditto	35	...	3	2	...	2	...	18,452
9	Bangalore and Kolar Districts	14	...	1	5	...	2	...	18,012
10	Mysore District	17	...	1	6	...	2	...	17,059
11	Kolar and Bangalore Districts	15	...	1	3	...	2	...	15,777
12	Kolar District	13	...	1	4	...	2	...	14,742
12	TOTAL	270	4	83	51	15	33	6	2,44,125

Survey Department on the 1st January 1885.

Officer in charge.	Number in General List.	Rank and Grade.	Date of assuming charge.	REMARKS.
11	12	13	14	15
Lieut.-Col. J. P. Grant	1	Superintendent, Revenue Survey and Settlement.	Jan. 15, 1868	
Major J. Rutherford	2	Deputy Superintendent, Revenue Survey	April 8, 1881	
Mr. D. Appu Rao	A	Assistant Commissioner	Oct. 6, 1882	Attached to the Survey Department.
" F. B. Clerk	D	Assistant Superintendent, 1st Grade	Nov. 26, 1869	
" M. S. Narain Rao	F	Assistant Superintendent, Local, 3rd Grade.	Nov. 1, 1883	
" H. Ramanujiengar	G	Amildar	May 23, 1884	Attached to the Survey Department.
" T. Abdul Karim	H	Assistant Conservator	Nov. 1, 1884	Ditto ditto.
" A. G. Hudson	L	Assistant Superintendent, 2nd Grade	Jan. 1, 1878	
Lieut.-Col. G. Mackenzie	C	Assistant Superintendent, 1st Grade	Aug. 1, 1881	
Mr. E. H. Butcher	E	Ditto ditto	Jan. 1, 1867	
" J. P. Barker	M	Ditto ditto	Aug. 1, 1882	
Major D. Cowie	O	Ditto ditto	June 2, 1884	

Classified List of the Officers of the Geological

No. of Officers in each grade.	NAMES.	Substantive Appointment.	Duty on which at present engaged.
1	H. B. Medlicott, A.M., F.R.S., F.G.S.	Superintendent, Geological Survey	Office
<i>1st Grade—R700, rising to R1,100.</i>			
1	William King, A.B., D.Sc.	Deputy Supdt., Geological Survey	Chhattisgarh
2	R. Bruce Foote, F.G.S.	Ditto ditto	Bellary
3	F. R. Mallet, F.G.S.	Ditto ditto	Office
4	Theo. W. H. Hughes, A.B.S.M., F.G.S.	Asst. Supdt., ditto	South Rewah
<i>2nd Grade—R500, rising to R700.</i>			
1	F. Fedden, A.B.S.M., F.G.S.	Assistant Supdt., Geological Survey	On furlough
2	C. A. Hackett	Ditto ditto	Rajputana
3	C. L. Griesbach, F.G.S.	Ditto ditto	Afghan Boundary Commission
4	R. D. Oldham, A.B.S.M.	Ditto ditto	Andaman Islands
5	P. N. Bose, B.Sc., F.G.S.	Ditto ditto	Raipur
<i>3rd Grade—R350, rising to R500.</i>			
1	T. H. D. LaTouche, A.D.	Assistant Supdt., Geological Survey	Assam
2	Edward James Jones, A.B.S.M.	Ditto ditto	Chhindwara
3	C. S. Middlemiss, A.D.	Ditto ditto	Kumaun
4	Vacant	Ditto ditto	
5	Vacant	Ditto ditto	
6	Vacant	Ditto ditto	
<i>Separately graded.</i>			
	O. Feistmantel, M.D.	Paleontologist, Geological Survey	On furlough
<i>Non-graded Officers.</i>			
1	J. Schaumburg	Artist, Geological Survey	Office
2	W. R. Bion	Registrar, ditto	Office
3	Kishen Singh	Sub-Assistant, ditto	On furlough
4	Hira Lal	Ditto ditto	Chhattisgarh
5	Thos. R. Blyth	Museum Assistant, ditto	Office

Survey of India on the 1st January 1885.

SALARY INCLUDING ALLOWANCES.			REMARKS.
Pay.	Travelling, Conveyance and House Allowances.	Total Pay and Allowances.	
R a. p.	R a. p.	R a. p.	
1,800 0 0	300 0 0	2,100 0 0	
1,100 0 0	60 0 0	1,160 0 0	
1,100 0 0	60 0 0	1,160 0 0	
1,100 0 0	60 & 150 0 0	1,310 0 0	Acting Curator.
1,000 0 0	30 0 0	1,030 0 0	Services placed at the disposal of the Public Works Department.
700 0 0	30 0 0	730 0 0	
700 0 0	30 0 0	730 0 0	
540 0 0	30 0 0	570 0 0	
540 0 0	30 0 0	570 0 0	
500 0 0	30 0 0	530 0 0	
440 0 0	30 0 0	470 0 0	Offg. in 2nd grade, vice Mr. Fedden.
380 0 0	30 0 0	410 0 0	
380 0 0	30 0 0	410 0 0	
700 0 0	30 0 0	730 0 0	
400 0 0	.	400 0 0	
360 0 0	.	360 0 0	
200 0 0	.	200 0 0	
200 0 0	.	200 0 0	
100 0 0	.	100 0 0	

General List of the Officers of the Geological

Genl. Seniority Number.	NAMES.	Passed in Vernacular.	Age.	Rank.	Grade.	Salary.
			Y. M. D.			R
1	H. B. Medlicott, A.M., F.R.S., F.G.S.		55 4 29	Supdt., Geological Survey	Separately graded.	1,800
2	William King, A.B., D.Sc.		51 5 16	Depty. Supdt., ditto	1st grade	1,100
3	R. Bruce Foote, F.G.S.		50 3 9	Ditto ditto	Ditto	1,100
4	F. R. Mallet, F.G.S.	Oct. 5, 1868	43 10 19	Ditto ditto	Ditto	1,100
5	F. Fedden, A.B.S.M., F.G.S.	Oct. 26, 1869	45 9 10	Asst. Supdt., ditto	2nd grade	700
6	C. A. Hackett	Oct. 5, 1868	51 5 20	Ditto ditto	Ditto	700
7	Theo. W. H. Hughes, A.B.S.M., F.G.S.	Aug. 3, 1868	41 4 30	Ditto ditto	1st grade	1,000
8	O. Feistmantel, M.D.	Oct. 4, 1875	36 1 10	Paleontologist, ditto	Separately graded.	700
9	C. L. Griesbach, F.G.S.	Sept. 15, 1880	37 0 21	Asst. Supdt., ditto	2nd grade	540
10	R. D. Oldham, A.B.S.M.	Aug. 1, 1881	26 5 2	Ditto ditto	Ditto	540
11	P. N. Bose, B.Sc., F.G.S.	Not required to pass.	29 7 20	Ditto ditto	Ditto	500
12	T. H. D. LaTouche, A.D.	June 6, 1882	29 2 2	Ditto ditto	3rd grade	440
13	Edward James Jones, A.B.S.M.	June 2, 1884	25 3 26	Ditto ditto	Ditto	380
14	C. S. Middlemiss, A.D.	Oct. 6, 1884	25 1 9	Ditto ditto	Ditto	380
15	Vacant					
16	Vacant					
17	Vacant					
<i>Non-graded Officers.</i>						
1	J. Schaumburg	Not required to pass.	45 5 30	Artist, Geological Survey	No grade	400
2	W. R. Bion	Do.	32 6 15	Registrar, ditto	Ditto	360
3	Kishen Singh	Do.	34 10 6	Sub-Assistant, ditto	Ditto	200
4	Hira Lal	Do.	33 5 2	Ditto ditto	Ditto	200
5	Thos. Ramsay Blyth	Do.	25 8 27	Museum Assistant, ditto	Ditto	100

Survey of India on the 1st January 1885.

Date of first appointment to the Department.	Date of appointment to present grade or rank.	Period of service counting for Pension.	Where employed at present.	REMARKS.
		Y. M. D.		
Mar. 24, 1854	April 1, 1876	30 9 8	Office.	
Mar. 4, 1857	April 21, 1875	27 6 27	Chhattisgarh.	
Sept. 28, 1868	June 14, 1881	26 3 3	Bellary.	
Feb. 12, 1859	April 11, 1883	25 10 17	Office.	
Oct. 1, 1860	Mar. 24, 1878	23 5 7	On furlough.	
Nov. 15, 1861	June 14, 1881	21 10 18	Rajputana.	
Nov. 11, 1862	April 11, 1883	20 1 13	South Rewah	Services placed at the disposal of the Public Works Department.
Mar. 25, 1875	Mar. 10, 1877	8 0 3	On furlough.	
Nov. 11, 1878	Jan. 25, 1883	6 1 20	Afghan Boundary Commission.	
Dec. 17, 1879	April 11, 1883	5 0 15	Andaman Islands.	
July 30, 1880	April 1, 1884	4 5 2	Raipur.	
Nov. 29, 1881	Nov. 29, 1881	3 1 2	Assam.	
Dec. 29, 1883	Dec. 29, 1883	1 0 3	Chhindwara.	Offg. in 2nd grade, vice Mr. Feistmantel.
Dec. 29, 1883	Dec. 29, 1883	1 0 3	Kumaun.	
Apr. 12, 1869	July 7, 1874	15 8 19	Office.	
Dec. 12, 1870	Dec. 31, 1873	10 6 15	Office.	
Jan. 7, 1874	April 1, 1879	10 11 25	On furlough.	
Jan. 7, 1874	April 1, 1879	10 11 25	Chhattisgarh.	
Mar. 1, 1884	Mar. 1, 1884	0 10 0	Office.	

Disposition List of the Officers of the Geological

Survey of India on the 1st January 1885.

NAMES OF OFFICERS.	Where employed.	No. in General List	Rank and Grade.	Date of first joining the Department.	STRENGTH OF ESTABLISHMENTS OF ALL GRADES.						
					Separately graded.	1st grade.	2nd grade.	3rd grade.	Non-graded Officers.	Clerks & Draftsmen.	Pressmen and Servants.
H. B. Medlicott, A.M., F.B.S., F.G.S. <i>1st Grade.</i>	Office	1	Supdt., Geological Survey.	Mar. 24, 1854	2	4	5	3	5	12	22
William King, A.D., D.Sc.	Chhattisgarh	2	Depy. Supdt., Geological Survey.	Mar. 4, 1857	...	...	...	...	...	...	...
R. Bruce Foote, F.G.S.	Bellary	3	Ditto	Sept. 28, 1858	4 first grade officers.	...	...	...	...	...	...
F. R. Mallet, F.G.S.	Office	4	Ditto	Feb. 12, 1859		...	...	...	...	...	...
Theo. W. H. Hughes, A.B.S.M., F.G.S. <i>2nd Grade.</i>	South Rewah	7	Asst. Supdt., Geological Survey.	Nov. 11, 1862		...	...	...	...	...	...
F. Fedden, A.B.S.M., F.G.S.	On furlough	5	Ditto	Oct. 1, 1860		...	...	...	...	...	...
C. A. Hacket	Rajputana	6	Ditto	Nov. 15, 1861	5 second grade officers.	...	...	...	...	...	...
C. L. Griesbach, F.G.S.	Afghan Boundary Commission.	9	Ditto	Nov. 11, 1878		...	...	...	...	...	...
R. D. Oldham, A.B.S.M.	Andaman Islands	10	Ditto	Dec. 17, 1879		...	...	...	...	...	...
P. N. Bose, B.Sc., F.G.S. <i>3rd Grade.</i>	Raipur	11	Ditto	July 30, 1860	3 third grade officers.	...	...	...	...	...	...
T. H. D. La Touche, A.B.	Assam	12	Ditto	Nov. 29, 1881		...	...	...	...	...	...
Edward James Jones, A.B.S.M.	Chhindwara	13	Ditto	Dec. 29, 1883		...	...	...	...	...	...
C. S. Middlemiss, A.B.	Kumaun	14	Ditto	Ditto . . . . .		...	...	...	...	...	...
Vacant . . . . .	. . . . .		Ditto.		...	...	...	...	...	...
Vacant . . . . .	. . . . .		Ditto.		...	...	...	...	...	...
Vacant . . . . .	. . . . .		Ditto.		...	...	...	...	...	...
<i>Separately graded.</i>											
O. Feistmantel, M.D. <i>Non-graded Officers.</i>	On furlough	8	Paleontologist, Geol. Survey.	Mar. 25, 1875	...	...	...	...	...	...	...
J. Schaumburg	Office	1	Artist, Geological Survey.	April 12, 1869	5 non-graded officers.	...	...	...	...	...	...
W. R. Bion	Ditto	2	Registrar, Geological Survey.	Dec. 12, 1870		...	...	...	...	...	...
Kishen Singh	On furlough	3	Sub-Asst., Geological Survey.	Jan. 7, 1874		...	...	...	...	...	...
Hira Lal	Chhattisgarh	4	Ditto	Ditto . . . . .	...	...	...	...	...	...
Thos. Ramsey Blyth	Office	5	Museum Assistant, Geological Survey.	Mar. 1, 1884	...	...	...	...	...	...

Where employed during last three years.	Annual Cost (Salary and Travelling Allowance of Officers and their Subordinates, if any) from April 1883 to March 1884.	REMARKS
	R a. p. R a. p.	
1881-82. Office. 1882-83. Office. 1883-84. Office and special leave.	Salary and fixed allowance 25,200 0 0 Travelling allowance 2,294 9 6 Hospital Assistant's pay, &c. 138 0 0	25,200 0 0
1881-82. Furlough. 1882-83. Ditto and Chhattisgarh. 1883-84. Chhattisgarh and Office.	Salary and fixed allowance 13,468 13 8 Travelling allowance 2,449 3 9 Hospital Assistant's pay, &c. 428 12 4	15,901 7 2
1881-82. Tinnevely. 1882-83. Madura and Kurnul. 1883-84. Kurnul, Hyderabad and Bellary	Salary and fixed allowance 14,220 0 0 Travelling allowance 2,449 3 9 Hospital Assistant's pay, &c. 428 12 4	17,098 0 1
1881-82. Office. 1882-83. Ditto and Jabalpur. 1883-84. Ditto and furlough.	Salary and fixed allowance 15,756 3 8 Travelling allowance 313 12 0	16,069 15 8
1881-82. South Rewah and furlough. 1882-83. Furlough and South Rewah. 1883-84. S. Rewah, Korea & Jhilmilli.	Salary and fixed allowance 12,653 9 11 Travelling allowance 2,485 8 0 Hospital Assistant's pay, &c. 225 1 0	15,364 2 11
1881-82. Kattywar. 1882-83. Ditto, Gujrat and Office. 1883-84. Office and furlough.	Salary and fixed allowance 9,462 11 9 Travelling allowance 637 13 0	10,050 8 9
1881-82. Rajputana. 1882-83. Ditto and furlough. 1883-84. Furlough and Rajputana.	On furlough.	
1881-82. Himalayas & duty in Europe. 1882-83. Ditto and Punjab. 1883-84. Punjab and Afghanistan.	Salary and fixed allowance 6,736 0 0 Travelling allowance 4,176 9 9	10,912 9 9
1881-82. Manipur. 1882-83. Jaunsar. 1883-84. Ditto and Andamans.	Salary and fixed allowance 6,585 0 0 Travelling allowance 2,630 5 0	9,215 5 0
1881-82. Nimar. 1882-83. Ditto and Chhattisgarh. 1883-84. Chhattisgarh.	Salary and fixed allowance 6,557 0 0 Travelling allowance 1,879 3 0	8,436 3 0
1881-82. Garo Hills. 1882-83. Assam. 1883-84. Ditto.	Salary and fixed allowance 6,585 0 0 Travelling allowance 1,733 13 0	8,318 13 0
1883-84. Korea, Jhilmilli & Chhindwara	Salary and fixed allowance 1,247 6 7 Travelling allowance 997 0 0	2,244 6 7
1883-84. Jaunsar and Kumaun.	Salary and fixed allowance 1,248 13 11 Travelling allowance 1,083 5 0	2,332 2 11
1881-82. Office. 1882-83. Ditto, South Rewah and furlough. 1883-84. Furlough.	On furlough.	
1881-82. Office. 1882-83. Ditto. 1883-84. Ditto.	Salary 4,800 0 0	
1881-82. Office. 1882-83. Ditto. 1883-84. Ditto.	Salary 3,900 0 0	
1881-82. Gwalior. 1882-83. Ditto. 1883-84. Ditto and furlough.	Salary 2,280 0 0 Travelling allowance 477 2 0 Chaprassi ditto 122 2 2	2,879 4 2
1881-82. South Rewah. 1882-83. Ditto. 1883-84. Korea, Jhilmilli & Chhattisgarh	Salary 2,280 0 0 Travelling allowance 602 13 0 Chaprassi ditto 149 12 9	3,032 9 9
1881. Office	Salary 100 0 0	

Index to Survey Lists for 1st January 1885.

A

		PAGES
Adams, F.	Survey of India	6 20 33
Adels, J. R.	Ditto	30
Algar, E. D.	Ditto	30
Amba, Pershad	Ditto	32
Andrew, Major D. C.	Ditto	2 16 45
Appurao, D.	Mysore Survey	49
Atkinson, D.	Survey of India	6 20 33
Atkinson, E. S. P.	Ditto	6 20 41
Atkinson, G. W. E.	Ditto	6 20 33

B

Babonau, T. W.	Survey of India	30
Babonau, Jr. T. W.	Ditto	14 20 43
Badgley, Lieut.-Col. W. F.	Ditto	2 16 35
Baird, Major A. W.	Ditto	4 16 37
Banerjee, Bance Madhub	Ditto	30
Banerjee, Kali Pado	Ditto	30
Barkley, W. C. G.	Ditto	10 20 35
Barker, J. A.	Ditto	10 20 41
Barker, J. P.	Ditto	14 20 43
Barker, J. P.	Mysore Survey	46 49
Barrett, E. C.	Survey of India	4 16 43
Barron, Lieut.-Col. W.	Ditto	2 16
Beavon, Major R.	Ditto	4 16 37
Bedford, N.	Ditto	14 20 43
Beechey, P.	Ditto	14 20 39
Belebam, G.	Ditto	6 20 37
Berkeley, E. F.	Ditto	14 20 45
Berkeley, L. F.	Ditto	12 20 43
Bion, W. R.	Geological Survey	50 52
Blyth, T. R.	Ditto	50 52
Bolton, T.	Survey of India	31
Bond, J.	Ditto	8 20 33
Bose, P. N.	Geological Survey	60 52
Butcher, E. H.	Mysore Survey	46 49
Buttress, W. S.	Survey of India	6 20 43
Burrard, Lieut. S. G.	Ditto	4 16 33
Byrn, A. E.	Ditto	30

C

Campbell, D.	Survey of India	12 20 39
Campbell, G.	Ditto	10 20 43
Carter, Major T. T.	Ditto	2 16
Chamarette, A.	Ditto	32
Charrier, H. A.	Ditto	31
Chatterjee, Cally Coomar	Ditto	14 20 35
Christie, A.	Ditto	8 20 35
Clarke, L. H.	Ditto	6 20 33
Claudius, T. E. M.	Ditto	8 20 39
Clerk, P. B.	Mysore Survey	46 49
Coard, A. R.	Survey of India	31
Coard, C. W.	Ditto	31
Coard, S. M.	Ditto	31
Coddington, Lieut.-Col. F.	Ditto	2 16 43
Cole, W. H.	Ditto	2 16 33
Collins, D. J.	Ditto	12 20
Collins, W. T.	Ditto	31
Connor, E. J.	Ditto	8 20 37
Connor, J.	Ditto	8 20 43
Cooke, G. H.	Ditto	4 16 33
Corkery, H.	Ditto	12 20
Cornelius, W. J.	Ditto	10 20 39
Cowan, Major S. H.	Ditto	4 16 43
Cowie, Major D.	Mysore Survey	46 49
Cowley, P. A. G.	Survey of India	6 20 45
Coxen, J. T. U.	Ditto	8 22 46
Cunningham, A. C.	Ditto	30
Cunningham, L. C.	Ditto	31
Cusson, G. D.	Ditto	10 22 39

INDEX TO SURVEY LISTS.

D		PAGES
Deas, D.	Survey of India	31
Dempster, G. G.	Ditto	32
DePrée, Lt. Col. G. C.	Ditto	2 16 33
Dickinson, R. R.	Ditto	12 22 45
Donaldson, W.	Ditto	81
Doran, P. J. W.	Ditto	10 22 31
Dowman, H.	Ditto	8 22 43
Drew, E. H. M.	Ditto	12 22 43
D'Pyrah, E.	Ditto	31
D'Kozario, F. A.	Ditto	30
D'Souza, A.	Ditto	4 16 35
Dunne, T. H.	Ditto	8 22 45
Dyson, C. G.	Ditto	32
E		
Ewing, A.	Survey of India	14 22 41
Ewing, R. C. D.	Ditto	10 22 30
Ewing, W. H. D.	Ditto	12 22 45
F		
Fedden, F.	Geological Survey	50 52 ...
Feistmantel, O.	Ditto	50 52 ...
Fielding, W. A.	Survey of India	10 22 35
Fink, L. G.	Ditto	32
Foote, R. B.	Geological Survey	50 52 ...
Francis, M.	Survey of India	30
Freeman, T. F.	Ditto	10 22 43
Fulford, J.	Ditto	31
G		
Ganga Pershad	Survey of India	32
Gastaud, M.	Ditto	14 22 39
George, A.	Ditto	12 22 35
George, C.	Ditto	12 22 39
George, R.	Ditto	32
Ghose, Cally Mohun	Ditto	33
Ghose, Doorga Narain	Ditto	30
Gibson, A. J.	Ditto	6 22 41
Gibson, R. A.	Ditto	10 22 43
Gore, Capt. St. G. C.	Ditto	4 16 ...
Graham, E.	Ditto	12 22 41
Grant, F.	Ditto	6 22 43
Grant, Lieut.-Col. J. P.	Mysore Survey	46 49 ...
Gray, C. O.	Survey of India	31
Green, W.	Ditto	30
Griesbach, C. L.	Geological Survey	50 53 ...
Gwynne, N. C.	Survey of India	8 22 35
H		
Hacket, C. A.	Geological Survey	50 52 ...
Haig, Lt. Col. C. T.	Survey of India	2 16 33
Hall, G. T.	Ditto	10 22 35
Hamer, C. F.	Ditto	8 22 41
Hanly, H. T.	Ditto	6 22 43
Harrold, J.	Ditto	32
Haward, H.	Ditto	32
Heaviside, Major W. J.	Ditto	2 16 37
Herschel, Lt. Lieut.-Col. J.	Ditto	2 16 ...
Hickie, J.	Ditto	10 22 45
Higgs, J. A.	Ditto	14 22 39
Hill, E. P. S.	Ditto	12 23 43
Hill, Major J.	Ditto	4 16 45
Hira Lal	Geological Survey	50 53 ...
Hobday, Capt. J. R.	Survey of India	4 18 39
Hodgson, Lieut. G. B.	Ditto	4 18 35
Holdich, Major T. H.	Ditto	2 16 ...
Hörst, H.	Ditto	2 16 41
Hudson, A. G.	Mysore Survey	46 49 ...
Hughes, B. R.	Survey of India	14 22 43
Hughes, B. V.	Ditto	32
Hughes, T. W. H.	Geological Survey	60 52 ...
Hutchinson, Major H. S.	Survey of India	4 16 46
J		
Jackson, E. J.	Survey of India	4 16 43
Jackson, Lieut. H. M.	Ditto	4 16 41
James, A. J.	Ditto	8 22 41
James, A. W. N.	Ditto	31
James, W. E. A.	Mysore Survey	46 49 ...
Jarbo, G. W.	Survey of India	10 22 45
Johnson, W. E.	Ditto	14 22 43
Jones, E. J.	Geological Survey	50 53 ...

K

		Pages
Kenting, J.	Survey of India	12 22 39
Keelan, H. E. T.	Ditto	6 24 37
Kelly, F. W.	Ditto	4 16 45
Kelly, J. C.	Ditto	12 24 43
Kelly, W. M.	Ditto	12 24 45
Kennedy, J. M.	Ditto	12 24 41
King, D. A.	Ditto	8 24 43
King, W.	Geological Survey	50 52 ...
Kishen Singh	Ditto	50 52 ...
Kitchen, A.	Survey of India	12 24 39
Kitchen, F.	Ditto	8 24 41
Kitchen, H. T.	Ditto	10 24 41
Knight, G. A.	Ditto	12 24 45
Kraal, C. S.	Ditto	12 24 43

L

Lagnier, L.	Survey of India	32
Laacron, E. W.	Mysore Survey	46 49 ...
LaTouche, T. H. D.	Geological Survey	50 52 ...
Lawson, A. M.	Survey of India	6 24 45
Lepage, H. L.	Ditto	31
Le Franc, E. A.	Ditto	32
Lilley, W. H.	Ditto	10 24 41
Little, E. G.	Ditto	8 24 43
Littlewood, H. R.	Ditto	6 24 45
Lloyd, T.	Ditto	32
Longe, Lieut. F. B.	Ditto	4 16 43

M

Macdonald, Bt. Col. Donald	Survey of India	2 18 ...
Mackenzie, B.	Ditto	32
Mackenzie, Major G.	Mysore Survey	46 49 ...
Mackenzie, J.	Survey of India	31
Madras, S. O.	Survey of India	10 24 33
Mallet, F. R.	Geological Survey	50 52 ...
Marshall, C.	Survey of India	32
Marshall, F.	Ditto	31
Martin, E. J.	Survey of India	10 24 33
May, J. A.	Ditto	6 24 39
McA'Fee, C. H.	Ditto	8 24 35
McCullagh, Major J. R.	Survey of India	4 18 41
McGill, G. A.	Ditto	6 30 33
McGill, J.	Ditto	4 18 ...
McHutton, J.	Ditto	10 24 43
McNair, W. W.	Ditto	8 24 33
Medlicott, H. R.	Geological Survey	50 52 ...
Middlemiss, C. S.	Ditto	50 52 ...
Mille, Mr. T. J. J.	Survey of India	14 24 41
Mitchell, D. L.	Ditto	31
Moore, F. W.	Ditto	14 24 43
Moore, W.	Ditto	32
Mukerjee, Tarapodo	Ditto	32
Murphy, J.	Ditto	10 24 43
Musgrove, A. J.	Ditto	30

N

Nabi Faksh, Munshree	Survey of India	30
Narain Rao, M. S.	Mysore Survey	46 49 ...
Newland, J.	Survey of India	10 24 45
Norman, C.	Ditto	12 24 35
Norman, S. F.	Ditto	12 24 35

O

O'Brien, M.	Survey of India	31
O'Donel, J. H.	Ditto	8 24 43
Ogle, M. J.	Ditto	6 24 41
Oldham, R. D.	Geological Survey	50 52 ...
Ollenbach, C. G.	Survey of India	32
Ollenbach, E. C.	Ditto	31
O'Sullivan, W. J.	Ditto	8 24 35

P

Palmer, A. G.	Survey of India	31
Palmer, G. G.	Ditto	31
Parker, G. E.	Ditto	10 24 43
Patterson, W. H.	Ditto	4 18 39
Pemberton, J. S.	Ditto	6 24 43
Penrose, W. H.	Ditto	10 24 41
Peters, P. A.	Ditto	12 26 43
Psychers, H. W.	Ditto	6 26 33
Peyton, J.	Ditto	6 26 35
Pocock, L. J.	Ditto	8 26 41
Pollen, Lieut. W. H.	Ditto	4 18 39
Potter, C. D.	Ditto	10 26 35
Price, W. C.	Ditto	8 26 43
Prunty, P. F.	Ditto	12 26 37
Pullan, Lt.-Col. A.	Ditto	2 18 35

		PAGES
Rendell, T. H.	Survey of India	8 26 37
Robert, W.	Ditto	10 26 35
Rodger, T. B.	Ditto	31
Rogers, Major M. W.	Ditto	2 18 33
Roy, Russic Lall	Ditto	31
Rutherford, Major J.	Mysore Survey	46 49 ...
Ryall, E. C.	Survey of India	4 18 35

S

Sandeman, Major J. E.	Survey of India	2 18 43
Schnumburg, J.	Geological Survey	50 52 ...
Seance, Bt. Col. J.	Survey of India	2 18 33
Scott, G. B.	Ditto	4 26 39
Scott, J. R.	Ditto	10 26 45
Sen, Hari Hur	Ditto	30
Senior, R. W.	Ditto	12 26 35
Serrao, P. J.	Ditto	14 26 35
Seyers, C. W. F.	Ditto	10 26 43
Shaw, T.	Ditto	10 26 43
Shaw, Joy Kristo	Ditto	31
Shaw, Mohesh Chunder	Ditto	30
Shome, Umbica Churnau	Ditto	32
Sinclair, R.	Ditto	30
Skilling, W. V.	Ditto	14 26 33
Smart, A. D.	Ditto	6 26 45
Smart, A. W.	Ditto	12 26 45
Smart, O. D.	Ditto	14 26 43
Smart, P. C. H.	Ditto	12 26 30
Smart, R. B.	Ditto	8 26 45
Smith, J.	Ditto	14 26 43
Smith, W. P.	Ditto	30
Smylie, S. M.	Ditto	6 26 30
Sonaullah, Munshee	Ditto	30
Stael, Major E. H.	Ditto	4 18 43
Stotesbury, W.	Ditto	8 26 31
Strahan, Major C.	Ditto	2 18 33
Strahan, Major G.	Ditto	2 18 ...
Swiney, G. C.	Ditto	10 26 45
Swiney, J. S.	Ditto	10 26 45

T

Talbot, H. B.	Survey of India	4 18 45
Talbot, Lieut. the Hon'ble M. G.	Ditto	4 18 ...
Tanner, Bt. Col. H. C. B.	Ditto	2 18 35
Tapsell, C.	Ditto	10 26 35
Tate, G. P.	Ditto	12 26 39
Thuillier, Bt. Lt.-Col. H. R.	Ditto	2 18 33
Todd, H.	Ditto	8 26 41
Todd, J.	Ditto	6 26 43
Todd, R.	Ditto	10 26 41
Todd, W.	Ditto	6 26 33
Torreus, C. P.	Ditto	10 28 41

V

Vallis, H. R.	Survey of India	30
Vallis, J. A.	Ditto	30
VanderBeek, G.	Ditto	10 28 39
Vyall, W. R.	Ditto	6 28 ...

W

Wahab, Lieut. R. A.	Survey of India	4 18 39
Wainright, E. A.	Ditto	10 28 41
Warde, F. E.	Ditto	14 28 45
Ware, T. E.	Ditto	30
Warwick, R. F.	Ditto	12 28 41
Waterhouse, Major J.	Ditto	2 18 33
Watson, J.	Ditto	32
White, P.	Ditto	12 28 45
Wilkins, Lt.-Col. W. H.	Ditto	2 18 33
Willis, G. S.	Ditto	14 28 45
Wilmer, Major J. R.	Ditto	4 18 41
Wilson, A. J.	Ditto	6 28 39
Wilson, B. M.	Ditto	12 28 33
Wilson, C. W.	Ditto	10 28 43
Wilson, J. H.	Ditto	10 29 41
Wilson, W. A.	Ditto	6 23 45
Wood, C.	Ditto	6 28 33
Wood, C. G. S.	Ditto	14 28 33
Woodthorpe, Bt. Lt.-Col. R. G.	Ditto	4 18 41
Wyatt, A. G.	Ditto	6 28 33

Statements of the Services of Officers in the Survey of India.

Corrected up to 1st January 1885.

BREVET COLONEL GEORGE CHARLES DEPRÉE, B.S.C., *Surveyor General of India.*

JOINED the late Honourable East India Company's Seminary at Addiscombe in February 1848; appointed 2nd Lieutenant of the Bengal Artillery on 9th December 1850; arrived in India, 18th June 1851, and joined the Artillery at Dum-Dum; leave on private affairs from 28th June to 15th November 1851; proceeded in December 1851 with the 6th Company, 9th Battalion, Artillery, on service to Arakan with the Pegu Field Force; surveyed on a large scale the station of Kyonk-Phyoo for the use of the Officer Commanding; ordered to examine and report upon the Tonghoop Pass between Arakan and Burma, as to its practicability for the passage of 150 elephants required by the force in Pegu, for which duty received letter of thanks by order of His Excellency the Governor General, Lord Dalhousie; appointed Assistant Executive Officer, Chittagong and Arakan Road, 30th November 1853; sick leave in India from 17th June to 5th December 1854; appointed Assistant Surveyor, Ganjam Topographical Survey, 20th October 1854; employed on the survey of the Cuttack Tributary Mehals, 12th March 1856; 1st Lieutenant on the 21st January 1856; appointed to the charge of the Ganjam Topographical Survey in March 1856, at the same time *ex-officio* Assistant Commissioner, Cuttack Division, 13th September 1856; organised No. 2 Ganjam Topographical Party in 1857; transferred from No. 1 to No. 2 Ganjam Topographical Party in 1858; owing to the mutiny in 1858 employed in running a series of triangles to define the coast line of the Bay of Bengal; 2nd Captain, 27th August 1858; leave on medical certificate to Europe, 10th January 1859 to 2nd April 1860; completed the survey of Cuttack, and commenced that of the Chota Nagpur Division, the designation of No. 2 Ganjam Party being changed to No. 4 Topographical Party, Chota Nagpur Division Survey; appointed *ex-officio* Assistant Commissioner, Chota Nagpur Division; during a long period decided many boundary disputes between the estates of the Rajahs of the Tributary Mehals; joined the Staff Corps, 19th February 1861; appointed Deputy Superintendent, 1st grade, Topographical Survey, on 20th October 1866; Major, 28th June 1868; furlough to Europe on private affairs, from 5th December 1868 to 8th December 1870; employed on the survey of a part of the Central Provinces and Rewah; appointed *ex-officio* Assistant Commissioner, Central Provinces, and Assistant Magistrate; on the completion of the survey of the Central Provinces in 1877, No. 4 Topographical Party being disbanded, appointed to the charge of No. 7 Topographical Party, Rajputana and Simla Survey; employed on the survey of the cantonments of Subathu and Kasauli on large scale, and on the survey of hill roads about Simla, 1878, as well as of the country of Bickaneer; Lieutenant-Colonel, 9th December 1876; Brevet-Colonel, 1st July 1881; furlough to Europe for one year, from 9th December 1881, extension for 1 month. Returned to India 28th December 1882 and appointed Deputy Surveyor General in charge Topographical Surveys from 1st January 1883; officiated as Surveyor General from 12th February 1883 up to the 11th January 1884; confirmed 12th January 1884.

WAR SERVICES.

Served with the Pegu Field Force in 1852-53—medal.

BREVET COLONEL JAMES SCONCE, *Bengal Staff Corps, Deputy Surveyor General in charge Revenue Survey Branch.*

JOINED the Honourable East India Company's Military Academy at Addiscombe, February 1852; date of first commission as 2nd Lieutenant, Bengal Artillery, 9th December 1853; landed in India, 2nd April 1854; promoted to 1st Lieutenant, 23rd September 1857; appointed to Bengal Horse Artillery, 11th February 1858; appointed Adjutant, 4th Battalion, Bengal Artillery, 15th July 1859; appointed Assistant Revenue Surveyor in the Bundelcund Revenue Survey, 21st October 1859; transferred to the Royal Artillery, May 1861; appointed to the charge of 1st Division, Central Provinces Revenue Survey at Jubbulpore, 27th June 1862; promoted to Revenue Surveyor (now Deputy Superintendent of Survey), 3rd grade, 24th January 1863; promoted to 2nd Captain, Royal Artillery, 3rd April 1863; transferred to the charge of 3rd Division, Central Provinces Revenue Survey at Snagor, 13th November 1863; proceeded on furlough to Europe on sick certificate, 25th July 1864; returned from furlough and appointed to do duty in the Office of Superintendent, Revenue Surveys, Calcutta, 16th March 1866; appointed to the charge of 6th Division, Lower Provinces Revenue Survey at Hazaribagh, 3rd November 1866; promoted to Deputy Superintendent of Survey, 2nd grade, 6th November 1868; transferred as Captain to Bengal Staff Corps, 8th March 1869; proceeded on furlough to Europe, 28th March 1872; returned from furlough and appointed to do duty in the Office of Superintendent of Revenue Surveys, Calcutta, 5th November 1873; appointed to the charge of the 3rd Division, Lower Provinces Revenue Survey at Midnapur, 6th December 1873; promoted to Brevet Major, 9th December 1873; transferred to the charge of the 8th Division, Revenue Survey (Western Soane Irrigation) at Arrah, 16th March 1876; promoted to Major, Bengal Staff Corps, 11th October 1876; appointed Deputy Surveyor General, 1st January 1879; promoted to Lieutenant-Colonel, Bengal Staff Corps,

9th December 1879; Bt. Colonel 9th December 1883; proceeded on furlough to Europe for 2 years from 14th March 1884.

WAR SERVICES.

Served with the 1st Battalion, Bengal Artillery, and No. 17, Light Field Battery, at the siege and capture of Delhi in September 1857; in action with the rebels at Bulundshuhur in October 1857; in action with the rebels at Agra, 10th October 1857; served during the operations leading to the relief of Lucknow by the Army under Sir Colin Campbell in October and November 1857; in action with the rebels at Cawnpore on 5th November 1857; in action with the rebels at Shmshabad, near Futtigarh, in January 1858; at Alumbagh during the capture of Lucknow in March 1858; has received a mutiny medal with clasps for "Delhi," "Relief of Lucknow," "Capture of Lucknow."

BREVET LIEUTENANT-COLONEL H. R. THULLIER, *Royal Engineers (Bengal), Deputy Surveyor General in charge Revenue Survey Branch.*

SERVICE at Addiscombe from 1st August 1855 to 11th June 1857; date of first commission as 2nd Lieutenant, 12th June 1857; promoted to 1st Lieutenant, 27th August 1858; date of arrival in India, 29th April 1859, but service in India commenced from 16th October 1857; appointed to the Survey Department as 2nd Assistant in the Great Trigonometrical Survey, 21st May 1859; promoted to 1st Assistant, 1st February 1861; designation changed to Surveyor, 3rd grade, 1st April 1866; promoted to 2nd grade, 1st October 1867; designation changed to Deputy Superintendent, 2nd grade, 1st September 1869; promoted to Captain, 10th November 1869; furlough to Europe on private affairs, 14th March 1871; promoted to Deputy Superintendent, 1st grade, 18th July 1871; returned to India from furlough, 9th March 1873; graded as Deputy Superintendent, 2nd grade, under the re-organization of 1874, 1st April 1874; Acting Deputy Superintendent, 1st grade, from 1st April 1874 to 3rd April 1876; officiated as Superintendent, Great Trigonometrical Survey, from 4th April 1876 to 31st October 1876; promoted to Major, 7th October 1876; Acting Deputy Superintendent, 1st grade, from 1st November 1876 to 1st January 1878; promoted to Deputy Superintendent, 1st grade, under the re-organization of 1878, 27th October 1878; furlough to Europe for two years from 17th November 1879; Brevet-Lieutenant-Colonel, 7th October 1883; Officiating Deputy Surveyor General in charge Revenue Survey Branch from 5th March 1884; confirmed 1st October 1884.

BREVET COLONEL CHARLES THOMAS HAIG, *Royal Engineers (Bombay), Offy. Deputy Surveyor General, in charge Trigonometrical Survey Branch.*

OBTAINED his first commission from the Honourable East India Company's Military College at Addiscombe on 8th June 1854; Lieutenant, 24th May 1856; arrived at Bombay, 5th July 1856; commanded a Company of the Bombay Sappers and Miners with the Persian Expeditionary Force; 1856-57; returned to India, October 1857; started same month in independent command of a Company of the Bombay Sappers and Miners to join the Rajputana Field Force, with which he was afterwards appointed Staff Officer of Engineers; in May 1858 was appointed Assistant Executive Engineer at Neemuch; 22nd September 1859, appointed 2nd Assistant in the Great Trigonometrical Survey of India, in which Department he has remained up to date; joined at Rajkot, 15th October 1859, but proceeded at once to join the Okhamandal Field Force; after the taking of Dwarka, employed in the Survey in Cutch and Kattywar till May 1860; then proceeded to Murree in the Punjab; returned to Kattywar in October 1860; promoted to 1st Assistant, Great Trigonometrical Survey, 1st February 1861; variously employed in the Survey Department in Kattywar, Guzerat, Meywar, Malwa, the Deccan, and Kanara, until the present time, with the exception of three breaks by furlough to Europe, viz., from 14th April 1865 to 13th October 1865, from 30th September 1869 to 22nd September 1871, and from 31st March 1877 to 3rd October 1878; Captain, 12th April, 1862; Deputy Superintendent, 2nd grade, 1st October 1867; Major, 5th July 1872; Lieutenant Colonel, 23rd January 1877; Officiating Deputy Superintendent, 1st grade, 1st November 1879—on deputation as Commissioner, Venice Geographical Exhibition; promoted to Colonel, 1st July 1881; resumed charge of the Guzerat Party on 27th October 1881; Officiating Deputy Superintendent, 1st grade, from 27th November 1881 to 31st December 1882, and again from 12th February 1883 to 31st October 1883; substantively promoted to Deputy Superintendent, 1st grade, 1st November 1883; Officiating Deputy Surveyor General in charge Trigonometrical Survey Branch, from 1st October 1884.

WAR SERVICES.

Served with Persian Expeditionary Force, 1856-57; present at the battle of Klushab, and at the taking of Mohamera—medal and clasp; served with the Rajputana Field Force, 1857-58; present at the siege and assault of Kota—medal and clasp; served with the Okhamandal Field Force, 1859; present at the siege of Dwarka.

BREVET LIEUTENANT-COLONEL J. HERSCHEL, *Royal Engineers (Bengal), F.R.S., &c., Deputy Superintendent, 1st Grade.*

JOINED at Addiscombe, February 1855; public examination, 12th December 1856; first commission, Ensign, Royal Engineers, 12th December 1856; Lieutenant, 27th August 1858; landed at Calcutta, 2nd January 1859; Second Assistant, Great Trigonometrical Survey, 3rd November 1859; First Assistant, 1st February 1861; sick leave to England, 20 months, 23rd April 1866;

Surveyor, 3rd grade, 1st April 1866; Surveyor, 2nd grade, 1st October 1867; returned to duty, 8th December 1867; Second Captain, 10th November 1869; Officiating Surveyor, 1st grade, 1st April 1871; reverted to substantive appointment, 31st October 1872; furlough to England, two years, 22nd August 1873; designation changed to Deputy Superintendent, 2nd grade, 1st April 1874; returned to India, 18th August 1875; Major, 10th March 1876; on special duty in England from 17th November 1879; Brevet Lieutenant-Colonel, 10th March 1883; Officiating Deputy Superintendent, 1st Grade, from 1st November 1883 to 11th January 1884; confirmed 12th January 1884.

MAJOR GEORGE STRAHAN, *Royal Engineers (Bengal), Deputy Superintendent, 1st Grade.*

JOINED the Corps of Royal Engineers at Chatham, February 1st, 1859; remained under instruction at the establishment there till June 1860; proceeded to India, October 4th, 1860; arrived in the country, November 20th, 1860; remained in regimental employ with the Sappers and Miners at Roorkee from 6th December 1860 till March 1868; employed in the Irrigation Department, Public Works Department, till July 2nd, 1862; appointed on 2nd July 1862 to Survey Department; served as Assistant in the Gwalior and Central India Survey for two years; received charge of

No. 7 Party, Rajputana Survey, 1st September 1864; * took sick leave to England for 20 months, from 10th November 1867 to 6th July 1869; promoted to rank of Captain, January 14th, 1871; appointed Deputy Superintendent, 3rd grade, November 10th, 1867; appointed Deputy Superintendent, 2nd grade, October 26th, 1870; transferred to charge of No. 8 Party, Mysore Survey, 1st October 1875; furlough to Europe on private affairs, May 1st, 1877; returned to India, April 15th, 1879; received charge of No. 2 Party, Khandesh Survey, June 4th, 1879; received charge of Mysore Topographical Party from 1st November 1879; promoted to rank of Major, 27th May 1881; received charge of No. 2 Astronomical Party from 4th November 1881; Officiating Assistant Surveyor General in charge, Engraving and Cartographic branches, Headquarters, Calcutta, from 27th April 1883 to 24th July 1883; received charge of No. 2 Astronomical Party on 1st August 1883; furlough to Europe for one year from 7th May 1884; appointed Deputy Superintendent, 1st grade, from 10th November 1884.

* *Vide G. O. No. 605, dated 26th September 1863,—vide General Report, 1860 to 1865, page 36, para. 160.*

WAR SERVICES.

Nil.

MAJOR THOMAS TUPPER CARTER, *Royal Engineers (Bengal), Deputy Superintendent, 2nd Grade.*

JOINED the service, 11th December 1857; arrived in India, 12th December 1859; did duty with the Bengal Sappers and Miners; appointed Acting Quarter Master to the same from 9th March 1860, and continued as such till 5th February 1860; ordered 6th February 1860 to join the Sikkim Field Force; appointed Probationary Assistant Engineer, Department of Public Works, 21st May 1861; posted to Peshawur Division, Department Public Works, 22nd June 1861; promoted to 2nd class Assistant Engineer, 16th November 1861; officiated as Executive Engineer, Hazara Division, from 18th December 1861 to 30th April 1862; appointed 2nd Assistant in Great Trigonometrical Survey of India, 1st March 1862; joined the Kashmir Party, 1st May 1862; promoted to 1st Assistant, junior grade, 21st April 1864; nominated to charge of Kashmir Party and Kumaon and Garhwal Party, 3rd February 1865, and remained in charge till 1st May 1867; promoted to Surveyor, 3rd grade, 1st April 1866; appointed to charge of the survey party accompanying the Abyssinian Expedition, 1st December 1867 to 8th March 1869, when, on completion of the work connected with this survey, returned to India; rejoined the Kumaon and Garhwal Party; October 1869, took charge of detached party, and proceeded to the North-Western Frontier to fix positions of peaks in country north of Peshawur; designation changed to Deputy Superintendent, 3rd grade, 20th August 1869; local Captain, 11th December 1869; Captain, 13th September 1870; furlough to Europe, 18th December 1870 to 16th December 1871; appointed to charge of levelling party, 4th December 1871; promoted to Deputy Superintendent, 2nd grade, 1st October 1871; appointed to charge of the Brahmaputra Party, 13th May 1872; reverted to Deputy Superintendent, 3rd grade, on the introduction of consolidated salaries, 1st April 1874; furlough to Europe, 4th January 1875 to 16th November 1876; appointed to charge of the Madras Party, 20th November 1876 to 31st May 1877; charge of the Guzerat Party, 15th June 1877; Major, 1st October 1877; promoted to Deputy Superintendent, 2nd grade, 1st January 1878; charge of Kumaon and Garhwal Party, 1st October 1878; assumed charge of No. 1 Gwalior and Central India Party, 6th May 1879; furlough to Europe for two years, from 1st December 1879; assumed charge of No. 2 Topographical Party, 3rd December 1881; Officiating Deputy Superintendent, 1st grade, from 30th April 1884 up to 2nd December 1884; furlough to Europe for 1 year from 6th December 1884.

WAR SERVICES.

Served in the capacity of Survey Officer with the Sikkim Field Force under Lieutenant-Colonel Gawler in 1861; mentioned in despatches,—*vide G. O. G. G., Military Department, No. 440, dated 14th May 1861*; served throughout the Umbeyla Campaign under Brigadier-General Sir Neville Chamberlain, K.C.B., and Major-General Garvoek, C.B., in 1863 against the Boneyr and other tribes on the North-West Frontier; mentioned in despatches,—*vide G. O. G. G., Military Depart-*

ment, No. 76, of 29th January 1864—medal and clasp; served in the Abyssinian Expedition under Lieutenant-General Sir Robert Napier, G.C.B., G.C.S.I.; mentioned in despatches,—*vide London Gazette* of 30th June 1868—medal.

BREVET-COLONEL DONALD MACDONALD, *Bengal Staff Corps, Deputy Superintendent, 2nd Grade*

JOINED the service, 20th October 1853; arrived in the country, 1st December 1853; appointed to the 25th Regiment, Bengal Native Infantry; Lieutenant, 18th January 1856; Officiating Quarter Master, May 1857 to April 1858; Adjutant, April 1858; sick leave to Europe, 20th May 1859 to 12th August 1860; appointed to the Survey Department, Revenue Branch, 19th December 1860; Captain, 1st January 1862; joined Staff Corps, 13th August 1864; Revenue Surveyor, 1st January 1865; Deputy Superintendent, 3rd grade, 1st April 1866; furlough, private affairs, to Europe, 18th January 1872 to 14th January 1874; Major, 20th October 1873; Deputy Superintendent, 2nd grade, 1st January 1878; promoted to Lieutenant-Colonel, 20th October 1879. Promoted to Brevet-Colonel 26th October 1883; furlough to Europe for 2 years from 7th March 1884.

WAR SERVICES.

Nil.

LIEUTENANT-COLONEL F. CODDINGTON, *Bengal Staff Corps, Offg. Deputy Superintendent, 1st Grade.*

JOINED the service as a 2nd Lieutenant in the Bengal Artillery on the 12th June 1857; arrived in India, 16th October 1857; promoted to 1st Lieutenant on the 27th April 1858; appointed to the Bengal Horse Artillery on the 23rd October 1858; services transferred to Royal Horse Artillery in May 1861; appointed an Assistant Surveyor in the Survey Department on the 13th January 1862, and transferred to Bengal Staff Corps from same date; appointed to the charge of a survey party, 3rd Division, Oudh, on the 1st January 1864; sick leave to Europe from the 10th December 1865 to 25th July 1867; promoted to Deputy Superintendent of Survey, 3rd grade, on the 26th July 1867; attached to Head-quarters office from 26th July 1867 till the 15th November 1867; received charge of the 4th Division, Central Provinces Revenue Survey, on the 27th November 1867; promoted to Captain, 12th June 1869; raised and received charge of a new survey, 10th Division, Deccan, on the 1st November 1871; furlough to Europe from 29th March 1875 to 18th March 1877; appointed to do duty in the Head-quarters office from 19th March 1877; promoted Major, 12th June 1877; furlough, on urgent private affairs, under Rule XI of 1868 from 16th February 1878; rejoined appointment in Head-quarters office, 12th August 1878; promoted to Deputy Superintendent, 2nd grade, on the 27th October 1878; furlough on private affairs for 183 days, from 9th November 1882, extension for 91 days and further extension for 274 days; promoted to Lieutenant-Colonel, 12th June 1883; returned from furlough and received charge of No. 1 Revenue Party, Hissar and Ferozepore District Survey, 3rd March 1884; Officiating Deputy Superintendent, 1st grade, from 1st October 1884.

WAR SERVICES.

Served with the Cawnpore Field Force and at intrenched camp at Alumbagh and capture of Lucknow between 30th December 1857 and 23rd April 1858.—(Medal with clasp for Lucknow.)

MAJOR CHARLES STRAHAN, *Royal Engineers (Bengal), Offg. Deputy Superintendent, 1st Grade, Assistant Surveyor General.*

DATE of first commission, 8th June 1860; landed at Calcutta, October 1862; appointed to Survey Department as Military 2nd Assistant, and attached to No. 1 Party, 26th September 1863; took charge of reconnoitring party in Bhutan under General Tytler in October 1865; promoted to Assistant Surveyor, 1st grade, 1st April 1866; rejoined No. 1 Party, 16th July 1866; promoted to Surveyor, 3rd grade, 1st December 1867; furlough to Europe from 2nd December 1871 to 27th October 1873; promoted to Captain, 20th August 1872; Officiating Deputy Superintendent, 2nd grade, 4th January 1874; reverted to Deputy Superintendent, 3rd grade, 1st April 1874; Officiating Deputy Superintendent, 2nd grade, 1st February 1878; reverted to Deputy Superintendent, 3rd grade, 5th October 1878; Officiating Deputy Superintendent, 2nd grade, 27th October 1878; reverted to Deputy Superintendent, 3rd grade, 22nd April 1879; officiated as Deputy Superintendent, 2nd grade, from 1st November 1879 to 13th March 1880; furlough to Europe from 27th March to 10th October 1880; Officiating Deputy Superintendent, 2nd grade, from 18th October 1880 to 9th January 1884; Brevet-Major, 2nd March 1881; promoted to Major 1st July 1881; officiated as Assistant Surveyor-General in charge Cartographic and Engraving Branches from 24th July 1883; promoted to Deputy Superintendent, 2nd grade, 10th January 1884; confirmed as Assistant Surveyor General, 23rd May 1884. Officiating Deputy Superintendent, 1st Grade, from 3rd December 1884, to the present time.

WAR SERVICES.

Served with the Bhutan Field Force, in charge of reconnoitring party under General Tytler, from October 1865 to 16th July 1866—medal and clasp; served with the Peshawur Field Force in Afghanistan under Sir Samuel Brown from March 1879 to end of first campaign in June 1879—Medal. Brevet of Major.

LIEUTENANT-COLONEL WILLIAM BARRON, *Bengal Staff Corps, Deputy Superintendent, 2nd Grade.*

JOINED the Bengal Artillery as 2nd Lieutenant on 11th December 1858; arrived in the Country, 4th February 1859; did duty with the Bengal Artillery at Meerut and Peshawur till end of March 1860; did duty with the Peshawur Mountain Train Battery during April and May 1860; rejoined the Artillery Division at Peshawur, June 1860, and continued there till appointed to the Peshawur Mountain Train Battery on 22nd August 1861; served with it at Murdan and Abbottabad till 3rd July 1862; appointed Assistant Revenue Surveyor in the Revenue Survey, 27th June 1862, and joined on 4th July 1862; joined the Bengal Staff Corps, 4th July 1862; Assistant Superintendent, 1st grade, 27th June 1866; surveyed in the Delhi, Peshawur and Hazara Districts till 15th December 1866; held charge of the North-West Frontier Survey from 12th October to 15th December 1866, and took charge of the 2nd Division, Lower Provinces, at Dibrugarh, Assam, on 1st February 1867; Officiating Deputy Superintendent, 3rd grade, 6th November 1868; continued there surveying in the Lakhimpur District till 8th December 1869; leave on medical certificate to Europe from 6th January 1870 to 3rd April 1871; promoted to Captain, 11th December 1870; appointed Deputy Superintendent of Survey, 3rd grade, on 1st April 1870; on return from furlough took charge of the North-West Frontier Revenue Survey on 17th April 1871; surveyed in the Dera Ghazi Khan District till 15th October 1873; transferred to the 4th Division, Revenue Survey, and took charge on the 13th November 1873; continued since then in charge, and surveyed District Moradabad (cadastrally) and District Budaon; Major, 11th December 1878; Officiating Deputy Superintendent, 2nd grade, from 7th November 1882 to 8th January 1883, and from 12th February 1883 up to 31st October 1883; furlough, private affairs, from 9th November 1883; confirmed as Deputy Superintendent, 2nd grade, 7th August 1884. Promoted to Lieutenant-Colonel from 11th December 1884.

Favourably mentioned in Despatch No. 7, dated India Office, London, 5th May 1870, from the Right Honourable the Secretary of State for India, to His Excellency the Right Honourable the Governor General of India in Council, for his work in the Lakhimpur District.

WAR SERVICES.

Served with the Peshawur Mountain Train Battery in the Mahsood Wuzcere Expedition during April and May 1860 and the forcing of the Burrara Pass; served as Assistant Surveyor with the Umbeyla Expedition, October 1863; severely wounded in the action at the Eagle's Nest Picket on 26th October 1863; wound pension for life (medal with North-West Frontier and Umbeyla clasps).

BREVET COLONEL H. C. B. TANNER, *Bombay Staff Corps, Deputy Superintendent, 2nd Grade.*

APPOINTED to the Bombay Artillery on the 8th June 1854; joined the Survey Department from the E Brigade, Royal Horse Artillery, as Assistant in the Sind Revenue Survey on 10th October 1862; transferred with the Sind Party to Chanda, Central Provinces; the party became the 4th Division, Central Provinces Revenue Survey, in February 1865; took sick leave from 18th February to 13th March 1866; furlough to Europe from 14th March 1866 to 11th May 1867; after re-joining from furlough, doing duty in the Head-quarters office, Calcutta, from 11th May to 23rd June 1867; was placed in charge of the 3rd Division, Central Provinces Revenue Survey at Saugor, on 24th June 1867; transferred with the party to the Nimar District in November 1867; became Officiating Deputy Superintendent, 3rd grade, from 6th November 1868; became Deputy Superintendent, 3rd grade, from 1st April 1870; took charge of the Bombay City Survey in addition to his other duties, in December 1869; transferred with the 3rd Division, Central Provinces Survey, to Bhawalpur; the party became the 1st Division, Bhawalpur Revenue Survey, in November 1870; transferred to the Topographical Party, which accompanied Sir Charles Brownlow's column to the Lushai Hills, on 1st November 1871 to 30th April 1872; on return from the Lushai Expedition was transferred to charge of 4th Division, Central Provinces, from 29th August 1872; the designation of this party was subsequently altered to the 11th Deccan Topographical Party from 1st October 1872; promoted to the rank of Major, 8th June 1874; took furlough on private affairs on 25th August 1876; rejoined the 11th Division, Deccan Survey, on expiration of furlough on 28th April 1877; ordered to join the Khyber column, under Lieutenant-General Sir Samuel Brown as Surveyor, in November 1878; joined the Great Trigonometrical Survey Office at Mussoorie on completion of Afghanistan campaign in June 1879; on special duty to Gilgit from July 1879 to 18th April 1882; promoted to Lieutenant-Colonel, 22nd November 1879; on furlough for 6 months from 19th April 1882; took charge of Darjeeling and Nepal Boundary Parties, 1st November 1882; Officiating Deputy Superintendent, 2nd grade, from 7th November to 31st December 1882, and from 14th March 1883 to the present time; Brevet-Colonel, 8th June 1884; confirmed as Deputy Superintendent, 2nd grade, from 1st October 1884.

WAR SERVICES.

Accompanied the Persian Expeditionary Force of 1856 as Subaltern in No. 5 Light Field Battery, and was present at the landing at Halila Bay, the taking of Reshire and Bushire, and the action of Kushint—(medal and clasp); accompanied a force despatched after the rebels from Kurra-choe to Nugger Parker in May 1859; accompanied Sir Charles Brownlow's column during the Lushai Expedition in November 1871 as Surveyor—(clasp); mentioned in despatches, and received the thanks of the Government of India; accompanied Sir Samuel Brown's column, 1st Division, Peshawar Valley Field Force, as Surveyor, from the commencement to the termination of hostilities in 1878-79.

MAJOR WILLIAM JAMES HEAVISIDE, *Royal Engineers (Bengal), Deputy Superintendent, 2nd Grade.*

JOINED Royal Military College, Addiscombe, 1st August 1857; first commission as 2nd Lieutenant, Bengal Engineers, 10th June 1859; joined at Chatham, 1st August 1859; left Chatham in March 1861; granted three months' extension in England to study railway engineering; landed in Calcutta, 1st November 1861; joined Sappers and Miners at Roorkee (about) 15th December 1861; joined Agra and Bombay Road Division, Department Public Works, as Probationary Assistant Engineer, 15th September 1862; promoted to 2nd grade Assistant (about) 1st May 1863; transferred to 2nd Division, Allahabad, Department of Public Works, in August 1864; left Department of Public Works for field service on 14th February 1865; on return from service joined the Great Trigonometrical Survey, 3rd January 1866, as 2nd grade Assistant; posted to East Calcutta Longitudinal Series, charge of No. 2 Astronomical Party, from September 1866 until taking furlough to Europe on 30th October 1870; promoted to 1st grade Assistant, Great Trigonometrical Survey, 1st March 1868; promoted to Captain, 24th March 1871; promoted to Deputy Superintendent, 3rd grade, Great Trigonometrical Survey, 5th April 1872; returned from furlough, 4th April 1872, to take charge of Pendulum operations, and remained in charge until the completion of them; in joint charge of Longitude operations with Major W. M. Campbell, r.e., from November 1875 until taking furlough, 16th November 1877; on return from furlough, 28th November 1878, proceeded to join the Southern Afghanistan Field Force; returned to India, and received charge of Khandesh and Bombay Native States Topographical Party, 24th October 1879; received charge of No. 1 Astronomical Party, 18th October 1880; Brevet Major, 2nd March 1881; promoted to Major, 1st July 1881; on furlough to Europe for 7 months from 28th April 1882; received charge of No. 1 Astronomical Party, 6th December 1882, and resumed joint charge of the Longitude operations till 29th April 1884, when took over charge of No. 2, Astronomical Party also; Officiating Deputy Superintendent, 2nd grade, from 29th April 1883 to 9th November 1884; confirmed, 10th November 1884.

WAR SERVICES.

Served with the Left Centre Column, Bhutan Field Force, as Assistant Field Engineer, 1865-66—Frontier medal and clasp for Bhutan; served in 1878-79 with the Southern Afghanistan Field Force on special survey duty; joined Sir Donald Stewart's column at Kandahar, and accompanied the Tal Chotiali Force under Sir M. F. Biddulph on its return to India; mentioned in Tal Chotiali despatches—Medal. Brevet of Major.

LIEUTENANT-COLONEL AYRTON PULLAN, *Bengal Staff Corps, Deputy Superintendent, 2nd Grade.*

APPOINTED a Cadet of Infantry, February 1856; landed in India, 29th April 1856; date of first commission as Ensign, June 14th, 1856; Lieutenant, 26th December 1856; Officiating Quarter Master, 4th Sikh Infantry, July 1857; sick leave from Delhi Field Force, 12th September to 30th November 1857; appointed Adjutant, Berry's Sikhs, November 1857; Adjutant, Gorukpur Military Police, January 1858; Adjutant, Benares Horse, January 1859; appointed to the Staff Corps, 18th February 1861; attached to Her Majesty's 8th Hussars, November 1861; Doing Duty Officer, 14th Bengal Cavalry, January 1862; officiated as Assistant Political Agent, and Bazar Master, Morar, from April to June 1862; Doing Duty Officer, 8th Bengal Cavalry, June 1862; appointed 2nd Assistant, Great Trigonometrical Survey, 18th January 1863; promoted to 1st Assistant (designation changed to Assistant Surveyor, 1st grade), 1st October 1866; promoted to Captain, 14th June 1868; furlough to Europe for two years, 31st December 1869; Assistant Superintendent, 1st grade, and Officiating Deputy Superintendent, 3rd grade, Great Trigonometrical Survey, 11th December 1871; appointed to the charge of the Kattywar Survey, 6th April 1873; promoted to Major, 14th June 1876; appointed Deputy Superintendent, 3rd grade, Great Trigonometrical Survey, 1st January 1878; furlough to Europe for one year, from 13th May 1878; returned to duty, 19th April 1879; resumed charge of Kattywar Survey, 26th April 1879; promoted to Lieutenant-Colonel, 14th June 1882; Officiated as Deputy Superintendent, 2nd grade, from 1st November 1883, to 27th November 1884; confirmed 28th November 1884.

WAR SERVICES.

Served as Orderly Officer to Brigadier Johnstone on the march from Jullundur to Delhi, June 1857; served with the 4th Sikh Infantry throughout the siege of Delhi; severely wounded—medal and clasp; also mentioned in despatches three times during the Indian rebellion, and received the thanks of Sir C. Wingfield, Chief Commissioner of Oudh, for the defence of the town of Bansee when attacked by an insurgent force, July 1858 (horse wounded).

MAJOR DAVID CLAPHAM ANDREW, *Bengal Staff Corps, Offg. Deputy Superintendent, 2nd Grade.*

JOINED the service on the 9th December 1859 as Ensign on the General List of Bengal Infantry; arrived in India, 7th March 1860; by G. O. C. C., dated 9th April 1860, directed to do duty with Her Majesty's 77th Regiment; promoted to Lieutenant on the 10th September 1861, by G. O. C. C., dated 25th March 1862; ordered to join and do duty with the 21st Punjab Infantry Native Regiment; joined the Revenue Survey Department as Probationary Assistant Surveyor on the 30th December 1862, and confirmed, 18th January 1864; Assistant Superintendent, 1st grade, on the 30th December 1866; joined Bengal Staff Corps, 18th January 1864; promoted to Captain on the 9th December 1871; promoted to Deputy Superintendent of Revenue Survey, 3rd grade, on the 1st Jan-

uary 1878; proceeded on furlough on medical certificate to Europe on the 28th May 1878; returned to India on the 12th June 1879, and resumed charge of substantive duties on the 13th June 1879; placed in charge of Bassein District, British Burma Survey, 11th November 1879; promoted to Major, 9th December 1879; transferred to No. 11 South Deccan Survey, 20th November 1880; received Personal Allowance of Rs. 100, until promotion to Deputy Superintendent, 2nd grade, 15th February 1883; Officiating Deputy Superintendent, 2nd grade, from 5th to 23rd March 1884, and again from 30th April 1884 to the present time.

WAR SERVICES.

Nil.

LIEUTENANT-COLONEL WILLIAM HENRY WILKINS, *Bengal Staff Corps, Offg. Deputy Superintendent, 2nd Grade.*

JOINED the Bengal Artillery, 12th December 1857; arrived in the country, 28th January 1858; promoted to 1st Lieutenant, 27th August 1858; joined Thomason College, Roorkee, 12th March 1861; obtained 1st class certificate, &c., 27th August 1862; privilege leave until 1st November 1862, on which date received general leave in India for three months, afterwards extended to six months; commanded the garrison battery in Agra Fort (the 20 days' leave not expended was never cancelled), 11th April 1863; joined the Fyzabad Revenue Survey as Assistant on probation, 27th April 1863; confirmed as Assistant Revenue Surveyor, and appointed to Staff Corps, from 11th May 1864; joined 1st Division, Central Provinces Revenue Survey, 13th November 1864; promoted to Assistant Superintendent, 1st grade, 27th April 1867; Captain, 12th December 1869; Assistant Superintendent in charge of 1st Division, Central Provinces Survey, 3rd August 1870 to 16th December 1870; joined the 2nd Division (Punjab) Revenue Survey, 1st July 1871; Officiating Deputy Superintendent, 3rd grade, 13th May 1871 to 24th September 1871; received charge of 2nd Division (Punjab) Revenue Survey, 20th October 1871; Officiating Deputy Superintendent, 3rd grade, from 18th January 1872 to 3rd March 1872, and from 28th March 1872 to 18th March 1877; received charge of 12th (Midnapur) Revenue Survey, 1st December 1876; received charge of 14th (Dearah), now 3rd, Division Survey of India, 7th December 1877; Major, 12th December 1877; confirmed as Deputy Superintendent, 3rd grade, 27th October 1878; received charge of No. 8 Party, Bassein District, British Burma, on 25th November 1881; received personal allowance of Rs. 100 until promotion to Deputy Superintendent, 2nd grade, 15th February 1883; on furlough to Europe for 273 days from 8th June 1883; extension for 3 days; promoted to Lieutenant-Colonel from 12th December 1883; returned from furlough and attached to Headquarters, Calcutta, from 14th March 1884; Officiating Deputy Superintendent, 2nd grade, from 7th August 1884.

WAR SERVICES.

Nil.

MAJOR J. E. SANDEMAN, *Bengal Staff Corps, Officiating Deputy Superintendent, 2nd Grade.*

JOINED the Royal Military College at Addiscombe in 1860; obtained a commission as Ensign in the Bengal Infantry on the 7th June 1861; arrived in India in October 1861; was attached for duty to Her Majesty's 90th Light Infantry; promoted to Lieutenant, 19th May 1862; 10th October 1862, passed the P. H. examination in Hindustani; had leave in India, private affairs, 15th December 1862 to 12th February 1863; by G. O. C. C., dated 23rd March 1863, was permitted to study at the Civil Engineering College at Roorkee; in September 1864 passed the College final examination, and obtained certificate qualifying for employment as an Engineer in the Department of Public Works; was appointed to the Survey Department, and joined appointment at Nagpur on the 6th October 1864; from 17th February 1866 was transferred to 2nd Division, Oudh Survey, and from 13th November 1866 to North-Western Frontier, a survey party in the Punjab; joined the Staff Corps on the 9th May 1867; served in the Punjab till 1870, when, by G. G. O. dated 20th December 1869, No. 1265, he was granted two years' furlough to England; he availed himself of this from 14th March 1870, and reported his arrival at Bombay again on the 16th February 1872; rejoined his appointment at Nagpur as Assistant Superintendent of Survey, on 21st February 1872; held charge of the 2nd Division, Central Provinces Revenue Survey, from 19th June to 10th August 1872; from 1st October 1872 was transferred to the Moradabad Cadastral Survey; in March 1873 was transferred to Bengal, and took over charge of the Midnapur Survey from 21st March 1873; was promoted to Captain by G. G. O. dated 18th June 1873, from 7th June 1873, under R. W. of 16th January 1861; made over charge of the Midnapur Survey in December 1873; and proceeded to join the Goalparah Survey in Assam; in October 1874 was appointed to the Behar Irrigation Survey as Assistant Superintendent; from 1st October 1875 obtained charge of the Darjeeling Waste Lands Survey, which after two months was converted into Dhanwar Estate Survey; with this party surveyed cadastrally the Dhanwar wards' estate in Hazaribagh, a portion of the Chota Nagpur estate in Lohardugga, and the Government estate of Barkagarh in Lohardugga; from the 1st December 1878 assumed charge of the British Burma Cadastral Survey; was promoted to Officiating Deputy Superintendent, 3rd grade, Survey of India, from 15th May 1876 to 7th November 1876, and from 14th July 1877 to 31st December 1877; officiated as a Deputy Superintendent, 3rd grade, from 1st January 1878; was promoted to Deputy Superintendent, 3rd grade, Survey of India, from 1st January 1879; promoted to rank of Major, 7th June 1881; furlough to Europe from 9th August 1881 to 30th October 1882; appointed to do duty in the Head-quarters Office, Calcutta, from 4th November 1882; received personal allowance of Rs. 100 until promotion to Deputy Superintendent, 2nd grade, 15th February 1883; assumed charge of Mirzapur and Gorakpur District Cadastral Survey, North-Western Provinces, from

1st November 1883; Officiating Deputy Superintendent, 2nd grade, from 24th September 1884.

WAR SERVICES.

Served with the Black Mountain Expedition in Hazara under Major-General Alfred Wilde from 15th August to 31st October 1868; was present at the advance from Munna Kaduna, and the taking of the Machai Peak; assisted in surveying the route taken by the force, and the surrounding country, under the direction of Colonel H. C. Johnstone, and compiled a map of the same; received the frontier medal.

LIEUTENANT-COLONEL W. F. BADGLEY, *Bengal Staff Corps, Officiating Deputy Superintendent, 2nd Grade.*

JOINED the service, 4th April 1857; arrived in Calcutta, 15th May 1857; doing duty with Her Majesty's 88th and 53rd Regiments to 25th November 1858; Lieutenant, 18th May 1858; Oudh Military Police, 26th November 1858; Adjutant, 26th Punjab Infantry, to 11th April 1865; appointed to the Topographical Survey on 8th May 1865, and joined No. 5 Party, employed in Rewah and Bundelcund, and remained with that party till October 1868; Assistant Superintendent of Survey, 8th May 1868; Captain, 4th April 1869; furlough, 23rd January 1869 to 21st January 1871; joined and received charge of No. 6 Topographical Party; employed in the Khasi, Garo, and Naga Hills on 8th June 1871, and remained in charge of that party up to 9th March 1882, with the exception of a period from October 1874 to August 1875, during which Major Godwin-Austen had charge; Major, 4th April 1877; on furlough to Europe for one year from 10th March 1882; extension for 1 year and 3 days; Lieutenant-Colonel, 4th April 1883; returned to duty 13th March 1884, and took charge of Guzerat Party on 25th March 1884; Officiating Deputy Superintendent, 2nd grade, 1st October 1884.

WAR SERVICES.

Mutiny and Lushai Expedition—medals and clasp; minor affairs on Eastern Frontier; four wounds; no recognition of services.

MAJOR T. H. HOLDICH, *Royal Engineers, Offg. Deputy Superintendent, 2nd Grade.*

COMMISSIONED Lieutenant, R.E., 17th December 1862; appointed to India, October 1864; arrived in India, 3rd March 1865; appointed Assistant to Lieutenant C. Strahan, R.E., in charge Field Survey Operations in Bhootan, October 1865; gazetted Assistant Superintendent, 2nd grade, Topographical Survey of India, 23rd July 1866, and joined the Rajputana Topographical Party; attached to special party for service in Abyssinia, December 1867; proceeded to England from Abyssinia on special duty, June 1868; Assistant Superintendent, 1st grade, 15th December 1868; returned to India, 4th May 1869, and joined the Gwalior and Central India Topographical Survey; acted in charge of the party during seasons 1871-72 and 1872-73; Officiating Deputy Superintendent, 3rd grade, from 11th August 1873 to 3rd November 1873, and again from 15th December 1873 to 14th May 1877; appointed to charge of Vizagapatam Agency and Central Provinces Survey, 15th December 1873; Captain, Royal Engineers, 4th June 1876; left India on furlough to Europe, 14th May 1877; recalled to join Afghanistan Field Force, December 1878; arrived in India, 15th January 1879; officiated as Deputy Superintendent, 3rd grade, from 15th January to 13th June 1879, and from 1st November 1879 to 28th April 1883. Brevet Major, 2nd March 1881; special leave to England for three months from 1st November 1880; assumed charge of Kohat Topographical Survey, 15th February 1881; promoted to Deputy Superintendent (new), 4th grade, 1st July 1882; promoted to Deputy Superintendent, 3rd grade, 29th April 1883; assumed charge of Baluchistan Topographical Party, 1st October 1883; on furlough to Europe for one year from 8th March 1884; recalled to duty and reported his arrival on the forenoon of the 25th August 1884, and attached to the Afghan Boundary Commission; appointed to officiate as Deputy Superintendent 2nd grade, from 3rd December 1884.

WAR SERVICES.

Served on special survey duty during Bhootan Campaign from October 1865 to close of campaign; present with the Buxa column to its farthest advance, and subsequently with the Dewangiri column during advance to the Monas; despatches not published—frontier medal and clasp for Bhootan; served on special survey duty during the Abyssinian Campaign from December 1867 to close of campaign; mentioned in despatches of Sir R. Napier, dated 1st June 1868; services commended by Secretary of State for War-medal; served on special survey duty during first period of Afghan Campaign from February 1879 till close of campaign; present with Sir M. Biddulph's division during march from Pishin to India *via* Tal Chotiali; mentioned in despatches by Sir M. Biddulph; services specially acknowledged in Field Force Order No. 427 of 16th May; received acknowledgment of Governor General in Council and Secretary of State for India; served in charge of survey operations in Northern Afghanistan during second period of the campaign; present at several actions fought near Kabul in November and December 1879, siege and defence of Sherpur, occupation of Lughman Valley, expeditions to Kohistan, Logar and Wardak, E. C., mentioned in despatches by Sir F. Roberts; received thanks of Governor General in Council and Secretary of State for India for services in charge of survey operations—medal with clasp for Kabul; served in charge survey operations during expeditions against the Mahsud Waziris in the spring of 1881; present at skirmish on Shaidar Mountain when survey party was attacked; mentioned in despatches by Brevet General R. Kennedy, Commanding Expedition.

MAJOR JAMES WATERHOUSE, *Bengal Staff Corps, Deputy Superintendent, 3rd Grade, and Assistant Surveyor General, Photo. Branch.*

JOINED the service as 2nd Lieutenant, Bengal Artillery, 10th June 1859; arrived in the Country, 11th October 1859; services placed temporarily at the disposal of the Foreign Department for special duty, 15th November 1861; left regimental duty, 16th January 1862; returned to regimental duty, 21st December 1862; appointed Officiating Commissary of Ordnance, 3rd class, 13th April 1866; services placed at the disposal of the Government of Bengal, 5th June 1866; appointed Assistant Revenue Surveyor, Lower Provinces, 27th June 1866; services placed at the disposal of the Government of India, Home Department, 7th July 1866; appointed Assistant Surveyor with superintendence of the photozincographic operations in the Office of the Surveyor General of India, 18th July 1866; joined the Survey Department, 22nd July 1866; leave on medical certificate to Europe, 25th March 1867 to 17th February 1869; re-appointed Assistant Surveyor, 2nd grade, 17th February 1869; gazetted Lieutenant in Bengal Staff Corps, 9th October 1869; promoted to 1st grade Assistant Superintendent of Survey from 17th June 1870; promoted to Captain, Staff Corps, 10th June 1871; attached to Colonel Tennant, R.E., for duty with the Indian Eclipse Expedition from 21st November 1871 to 8th January 1872; attached to Colonel Tennant, R.E., for duty in observing the Transit of Venus from 10th October 1874 to 1st January 1875; in charge Indian Eclipse Expedition to Nicobar Islands from 11th March to 18th April 1875; Officiating Deputy Superintendent of Survey, 3rd grade, from 26th March 1875; reverted to Assistant Superintendent, 1st grade, 19th September 1876; Officiating Deputy Superintendent of Survey, 3rd grade, from 23rd November 1877 to 6th January 1878; reverted to Assistant Superintendent, 1st grade, 7th January 1878; Officiating Deputy Superintendent, 3rd grade, from 1st February 1878; on special duty in Europe from 10th October 1878 to 8th November 1878; Officiating Deputy Superintendent, 3rd grade, from 9th November 1878 to 6th May 1879, and from 1st November to 11th December 1879; furlough to Europe on private affairs from 12th December 1879; resumed charge of the Photographic Office of the Surveyor General's Office, Calcutta, 26th December 1881; Officiating Deputy Superintendent, 3rd grade, from 26th December 1881; promoted to Deputy Superintendent (new), 4th grade, 1st July 1882; continued to officiate as Deputy Superintendent, 3rd grade, up to 9th January 1884; confirmed 10th January 1884.

WAR SERVICES.

Nil.

MAJOR MALCOLM W. ROGERS, *Royal Engineers, Deputy Superintendent, 3rd Grade, and Assistant Surveyor General.*

JOINED the service as a Gentleman Cadet in February 1860; appointed Lieutenant in the Royal Engineers, 18th December 1861; served as Division Officer, Cork, Ireland, from 1864 to 1865; landed in India, 20th October 1865; served with the Bengal Sappers and Miners until 4th July 1866; appointed Assistant Surveyor, 2nd grade, Great Trigonometrical Survey of India, on 5th July 1866; promoted to Assistant Surveyor, 1st grade, 5th December 1868; Officiating Deputy Superintendent, 3rd grade, from 18th December 1870; reverted to Assistant Superintendent, 1st grade, 1st November 1872; Officiating Deputy Superintendent, 3rd grade, from 6th April 1873; furlough on private affairs from 1st November 1873; Captain, 11th December 1873; returned to India and appointed Officiating Deputy Superintendent, 3rd grade, 28th October 1874; reverted to Assistant Superintendent, 1st grade, from 1st January 1878; Officiating Deputy Superintendent, 3rd grade, from 15th February 1878; reverted to Assistant Superintendent, 1st grade, from 26th April 1879; Officiating Deputy Superintendent, 3rd grade, 12th December 1879; furlough to Europe for 1 year and 4 days, 1st May 1880; returned from furlough, 15th June 1881; appointed Officiating Deputy Superintendent, 3rd grade, 15th June 1881; promoted to rank of Brevet Major, 2nd March 1881; promoted to Major, 18th December 1881; promoted to Deputy Superintendent (new), 4th grade, 1st July 1882; continuing to officiate as Deputy Superintendent, 3rd grade; officiated as Assistant Surveyor General, in charge Mathematical Instrument Office and Correspondence Office, Head-quarters, Calcutta, from 19th April 1883; confirmed 23rd May 1884; promoted to Deputy Superintendent, 3rd grade, 7th August 1884.

WAR SERVICES.

Served as Survey Officer with the 1st Division of the Quetta Field Force under Lieutenant-General D. Stewart, C.B., from 12th November 1878 to November 1879. Mentioned in despatches—Medal, Brevet of Major.

MAJOR J. HILL, *Royal Engineers, Deputy Superintendent, 3rd Grade.*

MAJOR JOHN HILL, Royal Engineers, joined the Corps of Royal Engineers as Lieutenant on the 25th June 1862, and after serving at the S. M. E., Chatham, and on the Plymouth Defences, arrived in India on the 10th December 1865; joined Bengal Sappers and Miners at Roorkee, 27th January 1866; appointed 2nd grade Assistant Surveyor, Great Trigonometrical Survey of India, 4th December 1866; posted to Kumaon and Garhwal Series, Great Trigonometrical Survey, 28th December 1866; sick leave to Europe from 11th November 1868 to 30th October 1869; promoted to Assistant Superintendent, 1st grade, Great Trigonometrical Survey, from 30th October 1870; received charge of the Kumaon and Garhwal Series, afternoon of 10th February 1871; Officiating Deputy Superintendent, 3rd grade, 1st April 1871; reverted to substantive appointment of Assistant Superintendent, 1st grade, 4th April 1872; Officiating Deputy Superintendent, 3rd grade, 23rd August 1873; relieved of charge of Kumaon and Garhwal Series, 1st October 1873; received charge of Bombay Party, 28th October 1874; local Captain, 25th June 1874; reverted to substantive appointment of Assistant Superintendent, 1st grade, 28th October 1874; relieved of charge of Bombay Party, 19th October 1879; furlough to Europe from 20th January 1875 to 28th January

1877; Captain, 16th September 1875; rejoined appointment in India, 28th January 1877; assumed charge of the Eastern Frontier Series, 17th March 1877; Officiating Deputy Superintendent, 3rd grade, 1st April 1878; reverted to substantive appointment of Assistant Superintendent, 1st grade, 22nd April 1879; furlough to Europe for 182 days, 26th May 1879; subsidiary leave from 17th May; returned from furlough and resumed charge of Eastern Frontier Series, 25th December 1879; Officiating Deputy Superintendent, 3rd grade, from 9th April 1880; promoted to Major, 25th June 1882. Deputy Superintendent (new), 4th grade, 1st July 1882; continuing to officiate as Deputy Superintendent, 3rd grade, up to 8th January 1883, and again officiated in the same grade from 12th February 1883 up to 30th September 1884; in charge of Tidal and Leveling Party, 4th April 1884; attached to Afghan Boundary Commission, 1st September 1884; promoted to Deputy Superintendent, 3rd grade, 1st October 1884; in charge of Konkan Topographical Survey Party, 2nd October 1884.

WAR SERVICES.

Nil.

MR. HENRY HÖRST, *Deputy Superintendent, 3rd Grade.*

APPOINTED Librarian and Accountant to the Thomason Civil Engineering College, Roorkee, 1st January 1853 up to September 1854; appointed as a 3rd class Sub-Assistant in the Great Trigonometrical Survey (without break of service), 1st September 1854; transferred to the Topographical Survey on Major-General Sir A. Waugh's retirement; promoted to the Senior Department, 1st April 1868; officiated as Surveyor, 3rd grade, from 16th October 1868 to 4th April 1869; promoted to Assistant Superintendent, 1st grade, 1st October 1869; officiated as Deputy Superintendent, 3rd grade, from 1st January to 11th October 1879. Services—Assisted in the Topographical Survey of the Jhelum and Rawal Pindi Districts till its completion; Gwalior and Central India Survey, Rajputana Survey, and in charge of same for nine months; Simla Survey, Bhopal and Malwa Survey; appointed to the charge of No. 2 Topographical Party or Khandesh and Bombay Native States Survey, 18th October 1874; in charge of picket which repulsed night attack on the Murree Sanitarium in September 1857 (*mutiny medal*); gave information, through Captain W. G. Murray, to the General Commanding the Agra Division in 1862, which led to the seizure of Harbuns Ram, Soubah of Dholpur, and dispersion of 6,000 troops he had quietly collected in the Chumbal ravines for a revolt; furlough to Europe for two years from 5th June 1879; extension for 3 months, with further extension on subsistence allowance, till 12th September 1882; promoted to Deputy Superintendent (new), 4th grade, 1st July 1882; Officiating Deputy Superintendent, 3rd grade, from 13th September up to 31st December 1882, and from 14th March 1883 up to 9th November 1884; confirmed 10th November 1884.

MR. WILLIAM HAMMOND COLE, M.A., CANTAB., F.R.A.S., F.R.G.S., *Deputy Superintendent, 3rd Grade.*

APPOINTED to the Educational Department, North-Western Provinces, direct from England, 14th April 1862, as Professor of Mathematics at the Government College, Agra; sick leave from 9th September to 8th November 1863; permitted to resign appointment from 1st March 1864 on account of continued ill-health; after nearly three years' residence at Mussooree as Mathematical Master at Mr. Maddock's School, was re-appointed to the Government service, 3rd January 1867, as Probationary Assistant Surveyor in the Great Trigonometrical Survey of India, and Assistant to the Officer in charge of the Computing Office, being at the same time placed in charge of the Photocyclographic Branch of the Computing Office, Dehra; appointed Assistant Surveyor, 2nd grade, on 1st September 1867; conducted the duties of the Computing Office in all its branches from middle of December 1867 to beginning of April 1868, during the absence of Mr. J. B. N. Hennessey, M.A., the Officer in charge, who was deputed to superintend the measurement of the Bangalore Base Line; designation changed to Assistant Superintendent of Surveys on 1st September 1869; promoted to 1st grade from 4th December 1870; officiated as Deputy Superintendent, 3rd grade, from 1st April 1871 to 16th December 1871; officiated again in this grade from 2nd November 1873 to 30th September 1874; officiated again as Deputy Superintendent, 3rd grade, and held charge of the Computing Office, from 4th January 1875 to 27th March 1876; furlough on private affairs from 27th March 1876 to 21st March 1877; on amalgamation and reduction of the three branches of the Survey Department on the 1st January 1878, reverted to the grade of Assistant Superintendent, 2nd grade, officiating in 1st grade; again promoted to 1st grade from 27th October 1878; officiated as Deputy Superintendent, 3rd grade, from 14th December 1880 to 14th June 1881; and again from 24th April to 14th May 1882; promoted to Deputy Superintendent (new), 4th grade, 1st July 1882; officiated as Deputy Superintendent, 3rd grade, from 7th November to 5th December 1882, and again from 20th April 1883 up to 27th November 1884; officiating in charge Head-quarters Office, Dehra Dun, and Survey Detachment in Kashmir from 12th February 1883; confirmed with effect from 12th January 1884; confirmed as Deputy Superintendent, 3rd grade, 28th November 1884.

MR. HENRY BLAQUIRE TALBOT, *Officiating Deputy Superintendent, 3rd Grade.*

APPOINTED in the Junior Department of the Great Trigonometrical Survey, 1st December 1848; served under the orders of Captains DuVernet and Robinson in the North-Western Himalaya Series and Sind-Saugor Doab, 30th June; resigned, 1852; joined the Revenue Survey as Sub-Assistant, 1st October 1852; Sub-Assistant, 2nd class, 1st January 1854; served under the orders of Captains G. Hunter Thompson, G. Hamilton and A. D. Vanrenon in the Baree Doab, Bharatpur, and Bundelcund Surveys; promoted to Assistant Surveyor, 1st January 1858; appointed to the charge of the Rohilcund Survey in October 1862; transferred to the charge of the 2nd or Upper Assam Survey, 29th November 1865; appointed to the Senior Branch at the

re-organization on 1st April 1866, as Probationary Assistant Superintendent; promoted to 1st grade on 12th September 1870; transferred to the 6th Division, Cadastral Survey, Agra, 1st October 1872, after the abolition of the 2nd or Upper Assam Survey; reverted to 2nd grade Assistant Superintendent on the amalgamation of the Topographical and Revenue Surveys, 19th March 1877; appointed to Behar Irrigation Survey from 1st October 1876, and in charge of the 9th Division, Cadastral Irrigation Survey, Orissa, 28th November 1878; promoted to 1st grade Assistant Superintendent, 22nd December 1878; appointed to charge of Tharawaddy, subsequently Promo and Akyab Districts, British Burma, Survey, from 1st November 1880; Deputy Superintendent (new), 4th grade, 1st July 1882; Officiating Deputy Superintendent, 3rd grade, from 29th April 1883.

MAJOR ANDREW WILSON BAIRD, A.I.C.E., *Royal Engineers, Officiating Deputy Superintendent, 3rd Grade.*

JOINED the service, 18th December 1861, as Lieutenant, Royal Engineers; arrived in India, 4th March 1863; served with the Bombay Sappers and Miners from 2nd April till 4th May 1864, when, having passed the colloquial examination in Hindustani, was appointed to the Bombay Public Works Department as Probationary Assistant Engineer; joined the Bombay Defences Division on 16th May 1864; gazetted Special Assistant, while employed in the Bombay Defences, on 27th May 1864; passed the departmental examination, and gazetted Assistant, 2nd class, on 28th March 1865; promoted to Assistant, 1st grade, 1st April 1865; appointed Special Assistant to Executive Engineer for Reclamations, 7th December 1865; raised to increased pay, 11th April 1866; placed on seconded list from date of joining the Public Works Department by G. G. O., 31st July 1866; appointed Executive Engineer, 4th grade, 2nd October 1867, but permitted to remain, at his own request, as Special Assistant for Reclamations in Bombay; services placed at the disposal of Military Department for duty in Abyssinia, 30th January 1868; appointed Assistant Field Engineer with the Abyssinia Force, 24th February 1868; retained by the Military Department on return from Abyssinia for special duty in Bombay by G. O. 30th June 1868; services placed at disposal of Chief Engineer, Presidency, when relieved from military duty, and joined Bombay Defences as Assistant Engineer, 1st grade, 24th November 1868; services placed at disposal of Government of India, 1st December 1868; appointed to the Great Trigonometrical Survey of India as Assistant Surveyor (corresponding to present Assistant Superintendent), 2nd grade, 4th December 1868; placed in charge Bombay Levelling Party on its formation, 27th September 1869; in consequence of reduction in the Survey this party was suspended; transferred to Guzerat Party as Assistant Superintendent, 31st March 1870; proceeded to England on medical certificate on 14th May 1870; in July 1871, while on furlough in England, employed specially to study the practical details of tidal observations and their reduction by harmonic analysis, as carried on under the superintendence of Sir William Thomson, until date of return to India; promoted, Assistant Superintendent, 1st grade, October 1871; on return to India posted to the Kattywar Party as Assistant Superintendent, on 30th April 1872; assumed charge of the Bombay Tidal and Levelling Party on its formation in November 1873; gazetted local Captain, 18th December 1873; on the introduction of the consolidated salaries scheme and revision of the grades of survey officers, moved down to Assistant Superintendent, 2nd grade, in May 1874; on special duty in England, reducing tidal observations of Gulf of Cutch, from September 1876 to May 1877; re-promoted Assistant Superintendent, 1st grade, 27th October 1876; but this order which promoted several officers was cancelled by G. O., 11th March 1877; returned to India in June 1877; appointed to the general superintendence and control of tidal observations upon the Indian coasts under the orders of the Superintendent, Great Trigonometrical Survey, by Government of India's Resolution of the 4th July 1877, on the amalgamation of three branches of the Survey Department, 1st January 1878; continued in charge of the tidal and levelling operations, Survey of India; promoted for the third time Assistant Superintendent, 1st grade, on the 1st January 1879; on deputation as Commissioner, Venice Geographical Exhibition, in August and September 1881; awarded medal of First class for tidal observations in India. At the Congress the Survey of India exhibited a complete set of tidal apparatus, diagrams, &c., and thus was enabled to be represented in class II (Hydrography), in which class a diploma of Honor was awarded to the Department; on furlough to Europe for 1 year and 148 days from 16th October 1881; promoted to Major, 18th December 1881; promoted to Deputy Superintendent (new), 4th grade, 1st July 1882; resumed charge of tidal and levelling operations on the 20th April 1883; Officiating Deputy Superintendent, 3rd grade, from 29th May 1883 to 3rd April 1884; on leave to Europe on urgent private affairs from 4th April 1884 to 28th September 1884; Officiating Deputy Superintendent, 3rd grade, and in charge of Tidal and Levelling operations from 1st October 1884.

WAR SERVICES.

Served with the Abyssinia Field Force in 1868 as Assistant Field Engineer, and appointed Traffic Manager of the Railway; mentioned in the despatches for zeal and management in bringing safely and expeditiously troops and baggage for embarkation—medal.

MAJOR J. R. McCULLAGH, *Royal Engineers, Officiating Deputy Superintendent, 3rd Grade.*

FIRST Commission, 18th December 1861; joined at Chatham, February 1862; joined at Belfast, June 1864; landed at Calcutta, 20th October 1865; joined Head-quarters, Bengal Sappers and Miners, Roorkee, 27th October 1865; Officiating Doing Duty Officer, 27th January 1866; Command of Detachment, 1st and 3rd Companies, B. S. and M., at Peshawur, 30th April 1866; passed Lower Standard, Hindustani; permanent Doing Duty Officer, 4th July 1867; Officiating Adjutant and 2nd-in-Command, B. S. and M., 17th April 1868; appointed to the Public Works Department, 6th November 1868; appointed to the Great Trigonometrical Survey of India, 1st March 1869, as Assistant

Surveyor, 2nd grade; officiating in charge, Guzerat Party, ten months, 1870-71; Assistant Superintendent, 1st grade, 1st January 1872; Captain, 11th December 1873; under the re-organization, became Assistant Superintendent, 2nd grade, 1st April 1874; furlough to Europe from 1st November 1873 to 27th October 1874; Officiating Assistant Superintendent, 1st grade, 28th October 1874; charge of No. 1 Extra Party, 13th November 1874; Officiating Assistant Superintendent, 1st grade, in charge No. 9 Party, Mysore Topographical Survey, 1st August 1875; reverted, 12th April 1877; Officiating Assistant Superintendent, 1st grade, in charge No. 8 Party, Mysore Topographical Survey, 27th April 1877; furlough to Europe, with six months' duty at Chatham in addition, from 5th November 1877 to 5th May 1879; Officiating Assistant Superintendent, 1st grade, 6th May 1879, and attached to Mysore Topographical Survey; promoted to Assistant Superintendent, 1st grade, on 14th December 1880; joined Hanthawaddy District Cadastral Survey in British Burma on 2nd June 1881, and received charge of Party on 1st August 1881; promoted to Major, 18th December 1881; Deputy Superintendent (new), 4th grade, 1st July 1882; Officiating Deputy Superintendent, 3rd grade, from 1st November 1883 to 23rd March 1884, and again from 4th April to the present time; assumed charge of Mysore Topographical Survey, 20th March 1884.

WAR SERVICES.

Appointed Assistant Field Engineer to the Bhutan Field Force, and to command No. 2 Company, B. S. and M., 3rd January 1866 (medal and clasp).

MAJOR JOHN RANDAL WILMER, *Bengal Staff Corps, Officiating Deputy Superintendent, 3rd Grade.*

JOINED the service as Lieutenant in the Royal Artillery on the 22nd June 1859; joined the Battery at Guernsey, 1st August 1859; arrived in India on 27th October 1860; Acting Adjutant, 11th Brigade, Royal Artillery, for one month, May 1863; held command of G-11, Royal Artillery, from 22nd September 1864 till 24th March 1866 (one year and six months); leave on private affairs, 7th May 1866 to 7th August 1866 (three months); Acting Adjutant, 11th Brigade, September and October 1867; embarked for England with G-11, Royal Artillery, on 20th November 1867; leave on private affairs, 18th February 1868 to 18th April 1868; returned to India and joined 3-22nd Royal Artillery, 28th April 1869; officiated as a 3rd class Commissary of Ordnance, from 22nd June 1869 to 23rd August 1869; appointed to Staff Corps, 24th August 1869; Assistant Superintendent, Topographical Survey, 24th August 1869; sick leave from 19th December 1871 to 2nd March 1872; promoted Brevet Captain, 22nd June 1871; promoted to Assistant Superintendent, 1st grade, Topographical Survey, 28th August 1872; substantive Captain in Staff Corps, 24th August 1873; appointed to charge of No. 5 Topographical Survey Party, 12th October 1874; reverted to Assistant Superintendent, 2nd grade, on amalgamation of the Surveys; Officiating Assistant Superintendent, 1st grade, 1st January 1878; promoted to Major, 22nd June 1879; promoted to Assistant Superintendent, 1st grade, 24th April 1882; promoted to Deputy Superintendent (new), 4th grade, 1st July 1882. Officiating Deputy Superintendent, 3rd grade, from 5th to 13th March, 30th April to 8th May, 7th to 24th August, and from 24th September 1884 up to the present time.

WAR SERVICES.

Nil.

MR. JOHN MCGILL, *Deputy Superintendent, 4th Grade.*

JOINED the Bombay Party, Great Trigonometrical Survey of India, as Sub-Assistant, 3rd grade, on the 1st October 1851; employed on the Aboo Meridional Series under Lieutenant, now General, H. Rivers, R.E.; promoted to Sub-Assistant, 2nd grade, 10th June 1854; triangulation, Kattywar, Thar, Parkar and Cutch under Lieutenant D. J. Nasmyth, R.E.; privilege leave for three months; Base Line, Karachi, and triangulation in Kutch; promoted to 1st class Sub-Assistant, 1st August 1856; triangulation in Sind, Kutch and Guzerat under Captain D. J. Nasmyth, R.E.; promoted to Senior Sub-Assistant on 1st January 1859; triangulation in Mewar and Guzerat under Captain C. T. Haig, R.E.; privilege leave for two months; promoted to Junior Civil Assistant, 2nd grade, on 1st December 1861; approximate work, Mangalore Series and Bombay Longitudinal Series, under Captain C. T. Haig, R.E.; privilege leave for one month in 1863; promoted to Civil 2nd Assistant, September 25th, 1862; approximate triangulation in Kanara and Mysore; promoted to Junior Civil Assistant on 17th August 1864; privilege leave for one month in November 1864; transferred to Northern Bombay Party, 1st November 1865, under Captain D. J. Nasmyth, R.E., and employed in the triangulation and survey of the Island of Bombay; assumed charge of the party for one month on Captain Nasmyth's going on sick leave and made over charge to Captain Haig, R.E., in March 1866; privilege leave for one month, 1st May 1867; promoted to Civil 1st Assistant on 1st September 1867; triangulation for topographical work in Kattywar; privilege leave for one month, 1st May 1870; promoted to Assistant Superintendent, 2nd grade, 1st March 1871; officiated in charge of the Kattywar Party for two months, from 1st September 1871, for Captain H. Trotter, R.E.; privilege leave for two months from 29th March 1873; promoted to 1st grade Assistant Superintendent, 1st April 1873; officiated in charge of Kattywar Party for two months from 25th September 1873; by new organization scheme of 1874, 1st April, Assistant Superintendent, 2nd grade, and officiating in 1st grade; three months' privilege leave from 1st June 1875; officiated in charge of Kattywar Party for two months from 9th April 1876; officiated in charge of Bombay Tidal and Levelling Party for three months, from 29th March 1877 to 1st July 1877; in charge of Kattywar Party from 27th April 1878; furlough for one year from 4th July 1879; Officiating Assistant Superin-

tendent, 1st grade, from 1st July 1880; received charge of South Deccan Topographical Party on 15th July 1880; received charge of Khandesh and Bombay Native States Party, 18th October 1880; made over charge, 3rd December 1881; on duty Head-quarters Office, Calcutta, from 10th December 1881; Assistant Superintendent (new), 1st grade, 1st July 1882; Officiating Deputy Superintendent, 4th grade, from 1st July 1882 up to 31st January 1883; in charge of Secondary Triangulation Party, 1st November 1882 to 15th October 1883; promoted to Deputy Superintendent, 4th grade, from 1st February 1883; proceeded on furlough (with subsidiary leave) on 25th October 1883.

MAJOR S. H. COWAN, *Bengal Staff Corps, Offg. Deputy Superintendent, 3rd Grade.*

JOINED the service, 9th December 1859; arrived in India, 9th April 1860; served with Bengal Artillery Depôt at Meerut, April 1860; posted to 4th Company, 3rd Battalion, Bengal Artillery; served with D Battery, 16th Brigade, Royal Artillery, February 1861; appointed in the Ordnance Department, 4th October 1866; admitted to Staff Corps, 19th January 1867; appointed Assistant Superintendent, 3rd grade, in the 4th Division Survey, Bengal, 19th January 1867; appointed Assistant Superintendent, 2nd grade, 17th March 1868; went on furlough to Europe to 30th May 1870; promoted to Captain (Brevet), 9th December 1871; returned from furlough, 3rd May 1872; transferred to 1st Division (Assam) Survey, 1st June 1872; promoted to Captain, 24th December 1872; went on sick leave to Europe, 16th July 1875; returned from Europe, 7th November 1876; transferred to Behar Irrigation Survey, 30th November 1876; transferred to Head-quarters office, 1st March 1878; transferred to take charge of Cachar Survey, 23rd November 1878; transferred to Head-quarters office, Photographic Branch, 14th November 1879; promoted to Major, 9th December 1879; on special duty, Surveyor General's Office, Photographic Branch, Calcutta, from 26th December 1881; assumed charge, Hooghly River Survey, 7th April 1882; Assistant Superintendent, 1st grade (new), 1st July 1882; personal allowance of Rs. 100, 1st April 1881; Officiating Deputy Superintendent, 4th grade (new), from 1st July 1882 up to 28th April 1883, and confirmed in that grade, 29th April 1883; furlough to Europe from 7th August 1883; assumed charge of Benares and Basti Districts (Cadastral) Survey, North-Western Provinces, from 11th December 1883; Officiating Deputy Superintendent, 3rd grade, from 6th to 13th March 1884, and again from 3rd December 1884 to the present time.

MAJOR EDWARD HARRIS STEEL, *Bengal Staff Corps, Deputy Superintendent, 4th Grade.*

JOINED the service on 8th June 1860, and arrived in India, 11th October 1860; leave on medical certificate to hills north of Kumaon from 10th June to 1st November 1861; leave on medical certificate to Europe from May 1865 to June 1866, after Bhootan Campaign; appointed Assistant Superintendent of Survey, 2nd grade, Survey Department, 1st February 1867, in Assam; leave to Europe on medical certificate, December 1867 to December 1868; returned to Regiment of Royal Artillery; re-appointed and rejoined Survey Department as Assistant Superintendent, 2nd grade, on 26th January 1869; admitted to Staff Corps, 26th January 1869; Captain, Staff Corps, 26th January 1873; in charge 2nd Division, Revenue Branch, from 2nd November 1876 to 19th April 1877, and again from 18th July to 18th November 1877; Officiating Assistant Superintendent, 1st grade, from 1st to 11th January 1878, again from 1st February to 6th May 1879; Officiating Assistant Surveyor General, 17th March 1878 to 9th October 1879; Officiating Assistant Superintendent, 1st grade, from 20th June to 10th October 1879; in charge of No. 1 Gwalior and Central India Topographical Party from 20th October 1879 to 18th October 1880; promoted to Major, 8th June 1880; Officiating Assistant Superintendent, 1st grade, from 1st November 1879 to 7th December 1881; personal allowance of Rs. 100, 1st April 1881; transferred to charge of Bassein District Survey from 20th November 1880; furlough on medical certificate from 8th December 1881; extension for 6 months; further extension for 4 months and 10 days; Assistant Superintendent (new), 1st grade, 1st July 1882; returned from furlough, 22nd October 1883; Officiating Deputy Superintendent, 4th grade, from the same date; assumed charge of Aligarh and Etah Districts Topographical Survey, North-Western Provinces, 27th October 1883 to 26th January 1884; confirmed as Deputy Superintendent, 4th grade, from 10th January 1884; superintending detached parties working in Dehra Dun, Chattisgarh and Ajmere, from 27th January 1884; resumed charge of Aligarh and Etah Districts Topographical Survey, North-Western Provinces, 7th August 1884.

WAR SERVICES.

Served with Khasi and Jaintia Field Force from December 1862 to May 1863; served with Bhootan Field Force from November 1864 to April 1865; present at taking of Dewangiri (medal and clasp).

MAJOR H. S. HUTCHINSON, *Bengal Staff Corps, Deputy Superintendent, 4th Grade.*

CADET at the Military College, Addiscombe, from January 1858 to December 1859; appointed a Lieutenant in the Bengal Artillery on 9th December 1859; landed in India, 9th April 1860; served with the Artillery at Meerut, Lahore, and Peshawur up to 9th April 1865; appointed to No. 1 Light Field Battery, Punjab Irregular Force, on 10th April 1865, per G. G. O. No. 380 of 1865; served with it at Bannu and Dera Ismail Khan up to 12th August 1867; appointed as Probationary Assistant Superintendent of Survey in the 3rd Division, Central Provinces, on 13th August 1867, and appointed to the Staff Corps on the same date; promoted to 2nd grade Assistant Superintendent of Survey on 13th August 1868; served with the 3rd Division up to 20th

May 1870; furlough to Europe on medical certificate from 21st May 1870 to 31st December 1871; promoted to local rank of Captain on 9th December 1871; served with the 4th Division, Central Provinces Survey, from 1st January 1872 to 30th September 1872; appointed to 11th Deccan Topographical Survey on 1st October 1872; promoted to substantive rank of Captain on 25th March 1873; Officiating Assistant Superintendent of Survey, 1st grade, from 1st January 1878; promoted to Major, 9th December 1879; served with Ghazipur Cadastral Survey from 1st January to 3rd April 1881; in temporary charge of the Darjeeling Survey Party from afternoon of the 8th April 1881; on duty Head-quarters office, Calcutta, from 2nd to 22nd August 1881; furlough on medical certificate from 29th August 1881 to 27th October 1882; Assistant Superintendent (new), 1st grade, 1st July 1882; personal allowance of Rs. 100 from 1st April 1881; Officiating Deputy Superintendent, 4th grade, from 29th October 1882 up to 6th August 1884; doing duty in the Head-quarters office, Calcutta, from 30th October to 25th November 1882; transferred to Bassein District Cadastral Survey, 26th November 1882; received charge of this Survey, 29th May 1883; promoted to the 4th grade of Deputy Superintendent, 7th August 1884.

WAR SERVICES.

Nil.

MR. EDWIN CLIFFORD BARRETT, *Deputy Superintendent, 4th Grade.*

JOINED the Right Bank, Indus-Sind Revenue Survey, as Probationary Assistant Surveyor, 18th November 1862; Sub-Assistant, 3rd grade, 1st January 1864; transferred to Central Provinces (Chanda District) Survey, 1st February 1865; passed the examination prescribed for the Senior Department, and appointed Assistant Superintendent, 2nd grade, 30th December 1868; sick leave for one month from 20th June 1869; transferred to the Raipur District Survey (2nd Division, Central Provinces), 1st November 1869; passed the Higher Standard Examination in Hindustani, 20th October 1871; was one of the staff of survey officers who accompanied the right column, Looshai Expeditionary Force, in 1871-72; officiated as Assistant Superintendent, 1st grade, from 30th December 1871 to 3rd March 1872; transferred to the 1st Division, Bahawalpur, from 1st June 1872; transferred to the 4th Division, North-Western Provinces, 1st October 1872; officiated as Assistant Superintendent, 1st grade, from 6th July 1873 to 4th November 1873, and again from 1st December 1873 to 14th January 1874; transferred to the Khurda Estate Survey, Orissa, 1st November 1876; in charge of the Khurda Estate Survey, from 22nd July to 12th November 1877; Officiating Assistant Superintendent, 1st grade, from 1st April 1878; in charge of the Cuttack District Irrigation Survey from 23rd May to 28th November 1878; transferred to the 6th Division, North-Western Provinces, from 1st December 1878; transferred to Ghazipur Survey, 20th July 1879, thence to Bassein Survey, British Burma, 11th November 1879; furlough to Europe, 27th August 1880 to 12th July 1882; subsidiary leave from 13th to 23rd idem; doing duty in the Head-quarters office, Calcutta, from 24th July to end of October 1882; Assistant Superintendent (new), 1st grade, 1st July 1882; Officiating Deputy Superintendent, 4th grade, from 24th July 1882 up to 30th September 1884; transferred to Burma Topographical Survey, British Burma; assumed charge of Kamrup District (Cadastral) Survey, Assam, 25th July 1883; confirmed in the 4th grade of Deputy Superintendent, from 1st October 1884.

WAR SERVICES.

Served with the right column, Looshai Expeditionary Force, in 1871-72—(medal and clasp), and received the thanks of the Government of India.

MAJOR REGINALD BEAVAN, *Bengal Staff Corps, Deputy Superintendent, 4th Grade.*

APPOINTED as Ensign, 4th May 1860, General List, Infantry; 11th June 1860, arrived in India; attached for duty to 19th Foot at Benares; leave on medical certificate to Europe from 15th October 1860 till 11th October 1862 (exclusive); 1st January 1862, promoted to Lieutenant; in 1861, went through a course of instruction at the School of Musketry, obtained extra first class certificate; on return to India was attached*

* By Presidency Division Order of 4th November 1862. to 23rd Fusiliers at Fyzabad; marched with them to Agra; 27th March 1863, appointed

Musketry Instructor to the 19th Husars at Lucknow, marched with them to Meerut, held this appointment till 15th April 1865; leave on private affairs to the hills; 12th July 1865, took up the appointment of Quarter Master, 22nd Punjab Native Infantry, at Umballa; marched to Morar in May 1866; attended the officers' surveying class at Roorkee in the winter of 1867-68, first class certificates for surveying and field engineering; 9th September 1867, appointed to the Bengal Staff Corps; 17th July 1868, appointed to the Topographical Survey Department as Assistant Surveyor, 2nd grade (this appointment was afterwards cancelled and made probationary); joined No. 6 Party, Khasi, Garo and Naga Hills Survey at Cherrapunji; 9th November 1869, promoted to Assistant Surveyor, 2nd grade; 1st May 1870, transferred to Revenue Branch and joined Hazaribagh Survey Party; 1st October 1870, transferred to Bahawalpur Party; 1st December 1870, transferred to Dera Ghazi Khan Survey; furlough (medical certificate) to England from 25th November 1871 to 22nd November 1872; joined 1st Division, Central Provinces Survey, 29th November 1872; on detached duty at Chandgurh from February to May 1873; on detached duty at Ahiri, Chanda District, during the field season of 1873-74; transferred to Dera Ismail Khan Survey, 1st October 1874; worked in Dera Ismail Khan, Bunnoo and Rawal Pindi Districts, and in the winter of 1877-78 in the Jowaki country and Kohat Pass; reduced to Assistant Superintendent, 3rd grade, 1st January 1878,

by the operation of the new organization of the Survey Department; 13th May 1878, officiating 1st grade Assistant Superintendent; 5th October, reverted to officiating 2nd grade; 27th October, promoted to 2nd grade (third time); 27th October, officiating 1st grade; 28th November, reverted to 2nd grade; 22nd December, officiating 1st grade; 4th February 1879, reverted to 2nd grade; promoted to Major, 4th May 1880, organized and took charge of the Baluchistan Topographical Survey, from 27th July 1880; Officiating Assistant Superintendent, 1st grade, from 17th November 1880 to 30th June 1882; Assistant Superintendent (new), 1st grade, 1st July 1882; Officiating Deputy Superintendent, 4th grade, from 1st July 1882 up to 9th November 1884; assumed charge of No. 1 Topographical Party, 1st October 1883; promoted to Deputy Superintendent, 4th grade, from 10th November 1884.

WAR SERVICES.

Attached to the Army operating in Southern Afghanistan from October 1878—medal; accompanied General Biddulph's Division to Girishk; mentioned in Lieutenant-General D. M. Stewart's despatches and in Field Force Order by General Biddulph, dated 6th March 1879; engaged surveying in Southern Afghanistan and Baluchistan till 1st April 1880, and again from 27th July 1880; accompanied the Marri Field Force under Brigadier-General C. MacGregor in October and November 1880; accompanied the Bozdar Field Force under Brigadier-General H. C. Wilkinson, in November and December 1881.

BREVET LIEUTENANT-COLONEL ROBERT GOSSET WOODTHORPE, *Royal Engineers,* *Deputy Superintendent, 4th Grade.*

JOINED the service, 25th June 1865; left Chatham, November 1867; employed in Works Department Manufacturing District in England till May 1869; arrived in India, 25th November 1869; joined the Head-quarters, Bengal Sappers and Miners, at Chakrata, 24th December 1869; served with them till 31st May 1871; joined the Topographical Survey, No. 4 Party, 18th July 1871; transferred to No. 6 Party for service with the Lushai Expeditionary Force, October 1871; had charge of the survey party with the Garo Expedition in field season 1872-73; accompanied Captain Badgley in the Naga Hills survey during field season 1873-74; Officiating Assistant Superintendent, 1st grade, 11th August 1873; reverted to Assistant Superintendent, 3rd grade, 1st April 1874, on amalgamation with Revenue Survey; separate charge, Naga Hills Survey Party, during field season 1874-75; re-appointed substantive Assistant Superintendent, 2nd grade, with effect from 1st April 1874; employed in Head-quarters office, Calcutta, as Assistant Surveyor General, in charge Lithographic Branch, from July till 31st October 1875; separate charge Naga Hills Survey, 1875-76; on death of Captain Butler, Political Agent, in January 1876, appointed Political Officer with the survey (extra allowance, Rs. 200 per mensem for this additional work, and thanks of the Governor General in Council and Secretary of State for India); charge of North Lakhimpur Topographical Survey, 1876-77 (thanks of the Governor General in Council); charge North Brahmputra Topographical Survey, 1877-78; Captain, 22nd May 1878; Officiating 1st grade Assistant Superintendent, 28th May 1878; reverted to officiating 2nd grade, 12th August 1878; transferred from No. 6 Topographical Party, September 1878; charge of survey party with the Frontier Expeditionary Field Force, Kuram Column; substantive 2nd grade Assistant Superintendent, 22nd December 1878; Officiating Assistant Superintendent, 1st grade, 1st January 1879; reverted to 2nd grade, 15th January 1879; furlough on private affairs for one year from 30th October 1880; promoted to rank of Brevet Major, 22nd November 1879, and to Brevet Lieutenant-Colonel, 2nd March 1881; appointed to charge of No. 6 Topographical Party from 3rd December 1881; Assistant Superintendent (new), 1st grade, 1st July 1882; Officiating Deputy Superintendent, 4th grade, 1st July 1882 to 8th January 1883, and from 12th February 1883 up to 27th November 1884, invested with the powers of a Magistrate of the 2nd class to be exercised within the Sub-Division of Karimganj, South Sylhet, and Halimgunj in the District of Sylhet, 13th March 1883; confirmed as Deputy Superintendent, 4th grade, 28th November 1884.

WAR SERVICES.

Served with the left column, Lushai Expeditionary Force, 1871-72 (frontier medal with clasp for Lushai); served with the Garo Hills Expedition in 1872-73, and with the Naga Hills Punitive Expedition in 1875 (mentioned in despatches); joined the Kuram Column, Frontier Expeditionary Field Force, 1st Afghanistan Campaign at Kohat, 25th October 1878; present at the action on the Peiwar Kotal (slightly wounded); mentioned in despatches; 2nd Campaign from 28th September 1879 to date of evacuation of Kabul; present at Alikhel, 14th October; at Killa Kariz Mir on 10th, and Charda, 11th December 1879; attack of Takht-i-shah, 13th; Asmai heights, 14th, and subsequent operations till 23rd December 1879, inclusive; skirmishes at Snidabad, 25th and 26th April 1880 (very slightly wounded); thanks of Governor General in Council and Secretary of State for India; mentioned in despatches of Generals Roberts and Ross.

Mr. G. H. COOKE, *Officiating Deputy Superintendent, 4th Grade.*

CAME to the Country in 1865; joined the Department, as Sub-Assistant, 1st class, under Major James Seance, 6th December 1866; Assistant Revenue Surveyor, 3rd class, on 6th December 1869; and Probationary Assistant Superintendent, 1st April 1870; Assistant Superintendent, 2nd grade, 10th May 1871; worked in the Hazaribagh District Survey until October 1871; from November 1871 to May 1872, with Lushai Expeditionary Force; examination leave for three

months, from 5th June 1872 to 4th September 1872; transferred to Head-quarters from 5th September 1872; from 1st November 1872 special duty, Chittagong; in June 1873, transferred sick to Naini Tal, and completed the survey of the Naini Tal Cantonment on the scale of 16 inches—one mile; in November 1873 was transferred to the 9th Bilaspur District Survey, and completed the survey of Aheri Zemindari; under the re-organization of 1st April 1874, Officiating Assistant Superintendent, 3rd grade; in November 1874, commenced work in the Azimgarh District under Mr. W. Lane (Cadastral Survey); on 1st April 1876, transferred to 2nd or Goorgaon District Survey; in November 1876, transferred to 1st or 10th Deccan Survey; held charge of the survey from 22nd August 1877 to 2nd January 1878; Officiating Assistant Superintendent, 2nd grade, from 1st January 1878; again took over charge of 1st or 10th Deccan Survey from the late Captain E. W. Samuells on 12th September 1878; furlough from 22nd May 1880 to 8th June 1882; promoted to Assistant Superintendent, 2nd grade, on 14th December 1880; transferred to No. 3 Party, Meerut, &c., Districts Survey, North-Western Provinces, and joined 9th June 1882; Assistant Superintendent (new), 1st grade, 1st July 1882; Officiating Deputy Superintendent, 4th grade, 1st July to 31st October 1882, 2nd and 3rd November 1882, from 7th idem up to 31st December 1882, 14th March 1883, and from 20th April 1883 up to the present time; transferred to Benares, &c., Districts (Cadastral) Survey, North-Western Provinces, 17th October 1883; appointed to do duty at the Head Quarters, Calcutta, from 17th August 1884.

WAR SERVICES.

On 1st November 1871 was deputed on special service with right column, Lushai Expeditionary Force; received a medal and thanks of the Government of India; served a second year in the Lushai country with Major Lewin, Political Officer, and connected the work done by the survey officers attached to the right and left column of the Lushai Expeditionary Force.

MR. EDWIN JAMES JACKSON, *Officiating Deputy Superintendent, 4th Grade.*

ARRIVED in the Country, 26th June 1864; joined the Department as Senior Sub-Assistant Revenue Surveyor, 26th September 1864; Probationary Assistant Superintendent, 1st April 1866; Assistant Superintendent, 2nd grade, 5th November 1868; sick leave from 4th July to 3rd August 1867; sick leave from 19th August to 30th November 1867; sick leave to Europe from 23rd July 1871 to 10th November 1872; in temporary charge of the 2nd Division, Revenue Survey, (Assam), 20th January to 13th February 1873, or about January 1873; special duty, defined the Naga Frontier Boundary common to District Sibsagar, from December 1873 to May 1874; Cachar Tea Grants Survey from 28th November 1874 to April 1875; relaying the old boundaries to the north-west of Faridpur, which had been washed away by the River Ganges during the past 20 years; employed on this work from February 1877 to April 1877; transferred to 5th Division Survey from 1st July 1877; on furlough from 1st May 1880 to 3rd December 1881; transferred to No. 2 Party, Hanthawaddy District, British Burma; Assistant Superintendent (new), 1st grade, 1st July 1882; Officiating Deputy Superintendent, 4th grade, afternoon of 18th November 1882; reverted to Assistant Superintendent, 1st grade, from 6th December 1882; Officiating Deputy Superintendent, 4th grade, from 29th April 1883 up to the present time; in charge of No. 2 Revenue Party, Hanthawaddy District Survey, British Burma, from 19th February 1884.

CAPTAIN ST. GEORGE CORBET GORE, *Royal Engineers, Officiating Deputy Superintendent, 4th Grade.*

JOINED the service, 8th January 1870; arrived in India, 15th November 1872; appointed Assistant Superintendent, 2nd grade, Great Trigonometrical Survey of India, 25th March 1873; joined the Great Trigonometrical Survey at Dehra Dun on 11th April 1873 and attached to the Dehra Dun Survey Party; Officiating Assistant Superintendent, 1st grade, from 2nd November 1873; by consolidation scheme of 1st April 1874 became Assistant Superintendent, 3rd grade, officiating 2nd grade; reverted to 3rd grade from 28th October 1874; officiating 2nd grade from 4th January 1875; transferred to Topographical Department for work, 15th October 1875, and attached to the Bhopal and Malwa Survey; transferred to Guzerat Party, Great Trigonometrical Survey, 5th January 1878; appointed to officiate in charge Guzerat Party, 2nd September 1878; relieved of the charge of Guzerat Party, October 1878; ordered on service to Afghanistan, 3rd January 1879; reverted to Assistant Superintendent, 3rd grade, 26th April 1879; Officiating Assistant Superintendent, 2nd grade, 16th July 1879 to 10th December 1880; furlough to Europe for two years from 11th December 1880; promoted to Captain, 8th January 1882; Assistant Superintendent (new), 2nd grade, 1st July 1882; promoted to Assistant Superintendent, 1st grade, 10th October 1882; appointed to do duty at Head-quarters, Calcutta, from 13th December 1882; Officiating Deputy Superintendent, 4th grade, from 29th May 1883 up to the present time; attached to the Afghan Boundary Commission, 14th August 1884.

WAR SERVICES.

Served with the Afghanistan Field Force, Quetta Column, from 9th February 1879 to 15th May 1880; accompanied Sir D. Stewart's column in its march from Kandahar to Kabul as Officer in charge of survey; present at the action of Ahmed Khel, near Ghuzni, and of Urzu Shabiz at Ghuzni.

CAPTAIN JAMES RAMSAY HOBDAV, *Bengal Staff Corps, Officiating Deputy Superintendent, 4th Grade.*

ENSIGN, 2-25th King's Own Borderers, 13th January 1869—G. O. C. C., 3rd March 1869, p. 88; date of arrival in India, 31st March 1869; 2nd Wing Subaltern on probation, 30th Regiment, Bengal Infantry, 20th March 1871—G. O. C. C., 4th April 1871, p. 165; 1st Wing Subaltern on probation, 38th Regiment, Bengal Infantry, 6th May 1871—G. O. C. C., 16th May 1871, p. 242; officiated Wing Officer, 38th Regiment, Bengal Infantry, in addition to his other duties, from 21st November 1872 to 5th January 1873—G. O. C. C., 19th December 1872, p. 609; Station Staff Officer, Buxa, Bhootan, 16th March 1873 to 18th September 1874—G. O. C. C., 5th April 1873, p. 170; officiated Wing Officer, 38th Regiment, Bengal Infantry, in addition to his other duties, from 6th April 1873 to 27th June 1873—G. O. C. C., 9th July 1873; Assistant Superintendent, 3rd grade (on probation), Topographical Survey Department, 11th September 1874—Revenue, Agriculture and Commerce Department No. 538 of 11th September 1874; Assistant Superintendent, 3rd grade, Topographical Survey Department, 7th July 1875—Revenue, Agriculture and Commerce Department No. 505 of 19th July 1875; Officiating Assistant Superintendent, 2nd grade, Survey of India, from 1st to 10th January 1878, 1st to 5th February 1878, 15th February to 28th April 1878, 15th January 1879 to 3rd February 1879, and from 3rd April 1881 to 30th June 1882; promoted to the rank of Captain, 13th January 1881; Assistant Superintendent (new), 2nd grade, 1st July 1882; Officiating Assistant Superintendent, 1st grade, from 1st July 1882 to 14th April 1883; promoted to Assistant Superintendent, 1st grade, 15th April 1883; Officiating Deputy Superintendent, 4th grade, from 25th July 1883 to 21st October 1883 and from 25th October 1883 to 23rd March 1884, and from 4th April 1884 to the present time; in charge Andaman Topographical Party, from 1st November 1883.

GENERAL LEAVE.

From 12th July 1873 to 17th November 1873—G. O. C. C., 16th August 1873, p. 330, and G. O. C. C., 23rd December 1873, p. 559.

FURLOUGH.

Two years under rules of 1868 on private affairs—G. G. O. No. 261 of 22nd March 1878; date of leaving Bombay, 29th April 1878; received telegram to join Afghan Field Force, Quetta Column, 15th December 1878; left England, 25th December 1878; arrived at Bombay, 15th January 1879; on medical certificate for one year from 1st December 1879; extended for 120 days.

WAR SERVICES.

Served with Kandahar Field Force, Southern Afghanistan, from 13th February to 31st October 1879.

MR. EDWARD C. RYALL, *Assistant Superintendent, 1st Grade.*

APPOINTED Apprentice Draftsman, Surveyor General's Office, Calcutta, 11th August 1854, and to the Great Trigonometrical Survey Department as 3rd class Sub-Assistant, Great Trigonometrical Survey, on 26th April 1855, and posted to head-quarters office, Dehra Dun; subsequently, on October 1st of the same year, was attached to the Rahoan Meridional Series; on 1st October 1856, 2nd class Sub-Assistant, transferred to the Jhelum and Rawul Pindi Topographical Survey Party; served with that party up to May 1859; during the recess seasons of 1858 and 1859 of the Jhelum and Rawul Pindi Party was deputed to do field duty with the Kashmir Survey; January 1st, 1860, promoted to 1st class Sub-Assistant; transferred to the Kashmir Survey in June 1859; served with that survey up to 1st October 1864, and was then transferred to the East Calcutta Longitudinal Series; on November 1st, 1865, was posted to the Eastern Frontier Series Party; sick leave from 25th January to 7th September 1866; on return from sick leave was appointed to the Kumaon and Garhwal Topographical Party from 1st May 1867; assisted that party in the large scale surveys of Mussoorie, Ranikhet and Kosi Valley, and subsequently in the survey of the Dehra Dun District; appointed to take charge of the Kumaon and Garhwal Party in March 1875; brought the field operations of that party to a close in September 1877; was relieved of the charge of that party on 1st October 1878, and for a short time posted to Surveyor General's Field Headquarters office, Dehra Dun; on the 1st January 1879 was transferred to the 3rd Division, North-Western Provinces Survey, Revenue Branch; Military service—as volunteer during the mutiny; served against the Murree rebels—(medal); transferred to Darjeeling party, 1st September 1881; sick leave from 10th December 1883 to 4th January 1884.

Abstract showing the steps obtained by Mr. E. C. RYALL while in the Survey Department.

Appointed 3rd class Sub-Assistant, 26th April 1855; 2nd class Sub-Assistant, 1st October 1856; 1st class Sub-Assistant, 1st January 1860; Junior Civil 2nd Assistant, 1st July 1862; Senior Civil 2nd Assistant, 1st January 1863; Surveyor, 2nd grade, 1st April 1869; Surveyor, 1st grade, 1st April 1871; Assistant Superintendent, 2nd grade (subsequently on 1st April 1874 designated 3rd grade), 1st April 1873; Officiating Assistant Superintendent, 2nd grade, 7th September 1879; reverted to 3rd grade on 9th October 1879; Officiating Assistant Superintendent, 2nd grade, from 1st November 1879; Assistant Superintendent (new), 2nd grade, 1st July 1882; Officiating Assistant Superintendent, 1st grade, from 1st July 1882 up to 31st January 1883; promoted to Assistant Superintendent, 1st grade, 1st February 1883.

LIEUTENANT THE HONOURABLE MILO GEORGE TALBOT, *Royal Engineers, Offg. Deputy Superintendent, 4th Grade.*

LIEUTENANT, 29th April 1873; appointed to India Establishment, 1st September 1876; arrived in India, 7th November 1876; appointed Supernumerary Assistant Superintendent, 3rd grade, Survey of India, 15th March 1880; Assistant Superintendent, 3rd grade, 24th April 1882; Officiating Assistant Superintendent, 1st grade, from 24th April to 14th May 1882; reverted to Officiating Assistant Superintendent, 2nd grade, from 15th May 1882; Assistant Superintendent (new), 2nd grade, 1st July 1882; Officiating Assistant Superintendent, 1st grade, from 1st July 1882 to 28th April 1883; promoted to Assistant Superintendent, 1st grade, 29th April 1883; officiating in charge No. 1 Central India and Rajputana Topographical Party, from 1st May 1883 up to 30th September 1883; officiating Deputy Superintendent, 4th grade, from 1st November to 10th December 1883, from 5th to 13th March and from 30th April to 8th May 1884; in charge No. 3 Topographical Party, Baluchistan Survey, from 29th April 1884 to 18th August 1884; Officiating Deputy Superintendent, 4th grade, from 7th to 25th August 1884 and from 24th September 1884 to the present time; attached to Afghan Boundary Commission, from 19th August 1884.

WAR SERVICES.

Assistant Field Engineer, Jowaki Expedition, 1877-78; attached to 3rd Company, Bengal Sappers and Miners, 1st Afghan Campaign, November 1878 to conclusion of peace; took part in operations at Ali Masjid, 2nd Afghan Campaign, with General Roberts' Force from commencement; present at battle of Churusia, 8th October 1879; of Lataband in December 1879; Assistant Field Engineer up to 14th March 1880; marched with the Force under Sir Frederick Roberts from Kabul to Kandahar.

LIEUTENANT FRANCIS BACON LONGE, *Royal Engineers, Offg. Deputy Superintendent, 4th Grade.*

LIEUTENANT, 2nd February 1876; appointed to India Establishment, 1st November 1878; arrived in India, 15th January 1879; appointed Supernumerary Assistant Superintendent, 3rd grade, Survey of India, 15th March 1880; Assistant Superintendent (new), 2nd grade, 1st July 1882; confirmed in the Survey Department, 13th September 1882; officiated as Assistant Superintendent, 1st grade, from 13th September 1882 to 9th July 1884; confirmed 10th January 1884; officiated as Deputy Superintendent, 4th grade, from 6th to 13th March 1884 and again from 3rd December 1884 to the present time.

WAR SERVICES.

Assistant Field Engineer, Afghan Field Force, Kabul Division, up to 14th March 1880 marched with the force under Sir Frederick Roberts from Kabul to Kandahar.

LIEUTENANT ROBERT ALEXANDER WAHAB, *Royal Engineers, Assistant Superintendent, 1st Grade.*

LIEUTENANT, 29th April 1873; appointed to Indian Establishment, 1st January 1876; arrived in India, 8th March 1876; attached to Madras Sappers and Miners from March 1876 till December 1880; appointed Assistant Engineer, 1st grade, Department Public Works, Military Works Branch, January 1881; temporary Executive Engineer, 4th grade, March 1882; appointed Assistant Superintendent, 2nd grade, Survey of India, 8th January 1883; Officiating Assistant Superintendent, 1st grade, from 1st February 1883 up to 6th August 1884; promoted to Assistant Superintendent, 1st grade, from 7th August 1884; in charge No. 3 Topographical Party, Baluchistan Survey, from 19th to 31st August 1884; Zhob Valley Expedition from 1st September 1884; in charge Zhob Valley Expedition, from 14th September 1884; in charge No. 3 Topographical Party, Baluchistan Survey, from 17th December 1884.

WAR SERVICES.

Served in the 1st Afghan Campaign from 9th January to 9th June 1879 as Assistant Field Engineer and Adjutant, Royal Engineers, Peshawar Valley Field Force; second Afghan Campaign, October 1879 to August 1880, as Assistant Field Engineer; Expedition against Mahsud Waziris in April and May 1881 as Assistant Field Engineer, and in charge of *R. E. Park*.

Mr. WILLIAM HENRY PATTERSON, *Assistant Superintendent, 1st Grade.*

APPOINTED Junior Sub-Assistant Revenue Surveyor, 1st December 1851, and posted to the Rechnab Doab (Punjab) Revenue Survey; transferred to the Sindh, Sagar Doab Revenue Survey, 1st October 1855; promoted to 3rd grade, 1st October 1855; transferred to the Derajat (Trans-Indus) Survey, 1st July 1856; promoted to 2nd grade, 1st May 1857; promoted to 1st grade, 1st January 1859; honorable mention in the Punjab Administration Report for 1859-60; thanks of the Lieutenant-Governor of the Punjab and of the Government of India; transferred to the 1st Division (Oudh) Revenue Survey, 1st October 1859; promoted to Assistant Revenue Surveyor, 3rd grade, 1st January 1862; on deputation at Head-quarters office (Drawing Branch), Calcutta, 1st

September 1862; promoted to 1st grade, 1st January 1866; designation changed to Civil Assistant, 3rd grade, 1st April 1866; transferred to 2nd Division (Oudh) Revenue Survey, 18th April 1866; during 1867-68 detached to make a survey of the cantonments, civil station, and city of Cawnpore on the scale of 12 inches to the mile; and revision of the plan of the Lucknow Cantonments with additions of environs 2 miles all round, on the scale of 8 inches to the mile; promoted to Civil Assistant, 2nd grade, 1st January 1868; promoted to Surveyor, 1st grade, 1st January 1871; transferred to the 1st Division, Lower Provinces Survey (Assam), 1st April 1871; appointed to the temporary charge of the 1st Division, Lower Provinces Survey, from 24th April to 12th June 1872; doing duty at the Presidency Office, 29th January 1873; rejoined 1st Division Lower Provinces Survey, in Assam in February 1873; appointed to the temporary charge of the 1st Division, Lower Provinces, Survey from 25th November 1873 to 7th January 1874; appointed to the charge of the Survey of Lakhiraj holdings in Districts Darrang and Kamrup, with deputation allowance of Rs. 50 per mensem from 1st December 1874 to 18th June 1879; services recognized by the Chief Commissioner, Assam, in Land Revenue Administration Report of District Darrang, season 1875-76; services placed at the disposal of the Chief Commissioner, Assam, for employment under the Settlement Officer, Cachar, 3rd January 1880; appointed Chief Draftsman, Surveyor General's Office, Calcutta, 8th August 1882; promoted to Assistant Superintendent, 2nd grade, 22nd January 1883; transferred to No. 5 Topographical Party (District Mirzapur), 1st February 1883; Officiating Assistant Superintendent, 1st grade, from 1st February 1883 to 30th September 1884; promoted to Assistant Superintendent, 1st grade, from 1st October 1884; in temporary charge of No. 2 Party, Bhopal and Malwa Topographical Survey, from 5th August to 27th October 1884; retransferred to No. 5 Topographical Party, Mirzapur District; in charge No. 2 Party, Bhopal and Malwa Topographical Survey, from 24th November 1884.

LEAVE on private affairs from 1st May to 31st August 1862; leave on private affairs to Europe from 20th July 1872 to 18th January 1873; leave on private affairs to Europe from 11th July 1879 to 2nd January 1880.

SPECIAL POWERS. Vested with powers of a Deputy Collector under Regulation IX of 1833 in Districts Kamrup, Nowgong, and Darrang, 11th January 1872; vested with powers of Deputy Collector under Act V of 1875 B. C. (Surveys) in District Cachar, 19th February 1880.

MILITARY SERVICES. As volunteer during the Mutiny of 1857-58; served against the Murree Rebels—medal.

Mr. FREDERICK WILLIAM KELLY, *Assistant Superintendent, 1st Grade.*

APPOINTED Junior Sub-Assistant, 4th December 1854; promoted to Sub-Assistant, 1st January 1856, in the Punjab and Sind Surveys; special leave for four months from 21st January 1858, which was overstayd from 21st May to 16th August 1858; employed as Sub-Assistant, 2nd class, in the Bhurtpur and Bundelcund Surveys, 17th August 1858; promoted to Sub-Assistant, 1st class, 1st January 1861; transferred to 2nd Division Oudh Survey, 3rd February 1861; promoted to Assistant Revenue Surveyor, 3rd class, 1st January 1864; promoted to Civil Assistant, 4th grade, 1st April 1866; transferred to Head-quarters office, Calcutta, 18th September 1866; promoted to Civil Assistant, 3rd grade, 1st July 1867; promoted to Surveyor, 2nd grade, 1st July 1869; in temporary charge of Midnapur Survey from 2nd March to 19th June 1876; promoted to Surveyor, 1st grade, with personal allowance of Rs. 50, 8th July 1879; promoted to 2nd grade Assistant Superintendent, 22nd February 1883; promoted to officiate as Assistant Superintendent, 1st grade, from the same date; transferred to Prome and Akyab Districts Cadastral Survey, British Burma; promoted to Assistant Superintendent, 1st grade, 10th November 1884.

LIEUTENANT HUGH MILBOURNE JACKSON, *Royal Engineers, Assistant Superintendent 1st Grade.*

BORN, 27th March 1858; received Commission in Royal Engineers, 19th June 1877; under instruction at the S. M. E., Chatham, from 19th February 1878 to December 1879; served in the 7th Field Company, Royal Engineers (Chatham), from 20th March 1880 to 1st December 1880; transferred to the Indian Establishment, 1st February 1881; served with the Bengal Sappers and Miners at Roorkee, Calcutta, in the Naga Hills and at Rawal Pindi, from May 1st, 1881, to June 7th, 1883; appointed to Survey of India Department as Assistant Superintendent, 2nd grade, with effect from the 11th June 1883, and to officiate as Assistant Superintendent, 1st grade, from the same date; officiating in charge of Mysore Topographical Survey from 13th February to 19th March 1884. Confirmed as Assistant Superintendent 1st grade 28th November 1884.

WAR SERVICES.

Nil.

LIEUTENANT WALTER HUNGERFORD POLLEN, *Royal Engineers, Officiating Assistant Superintendent 1st Grade.*

LIEUTENANT, April 6th, 1879; appointed to Indian Establishment, 20th January 1883; arrived in India, 7th March 1883; served with the Bombay Sappers and Miners up to 6th April 1883; Extra Aide-de-Camp to the Governor General of India, from 6th April 1883 to 25th April 1884;

appointed Assistant Superintendent, 2nd grade, Survey of India, 26th April 1884; Officiating Assistant Superintendent, 1st grade, from the same date; transferred to No. 1 Party, Central India and Rajputana Topographical Survey, from 1st October 1884.

WAR SERVICES.

Served with the 26th Company, Royal Engineers, in the Egyptian Campaign, August 9th to October 10th, 1882.

LIEUTENANT GODFREY BECKET HODGSON, s.c., *Offg. Assistant Superintendent, 1st Grade.*

OBTAINED his First Commission on 10th May 1878, as 2nd Lieutenant in Her Majesty's 22nd Cheshire Regiment; Lieutenant in the same Regiment, 13th November 1878; appointed on probation to the Bengal Staff Corps and attached as Wing Officer to the 4th Goorkhas, 15th September 1880; appointed permanently to the Bengal Staff Corps and confirmed in his appointment to 4th Goorkhas on 15th September 1881, but to date from 13th November 1878 (date of Lieutenancy); Officiating Quarter Master, 4th Goorkhas, from 23rd December 1880 to 10th February 1883; exchanged at his own request into 3rd Goorkhas as Wing Officer, 21st March 1883, where he remained till appointed to the Survey of India as Assistant Superintendent, 2nd grade (on probation); date of appointment, 12th September 1883, confirmed as Assistant Superintendent, 2nd grade, and Officiating Assistant Superintendent, 1st grade, 23rd July 1884.

WAR SERVICES.

Left Peshawar on 3rd August 1880 to join the 4th Goorkhas on Field Service in Afghanistan; joined that Regiment eventually at Kila Abdulla in the Pishin Valley, 15th September 1880; returned to India, 9th October 1880—medal.

LIEUTENANT SIDNEY GERALD BURRARD, *Royal Engineers. Officiating Assistant Superintendent, 1st Grade.*

RECEIVED Commission in Royal Engineers, 6th April 1879; Assistant Secretary to Ordnance Committee for gunnery experiments, April 3rd, 1881, to December 8th, 1882; transferred to Indian Establishment, 8th December 1882; landed in India, 10th January 1883; attached to Bengal Sappers and Miners up to 24th March 1883, when appointed to P. W. D., Beluchistan Agency; Personal Assistant to Superintending Engineer and Secretary to Governor General's Agent for Beluchistan, from 2nd April 1883 to 1st September 1884; appointed Assistant Superintendent, 2nd grade, Survey of India, 2nd September 1884; Officiating Assistant Superintendent, 1st grade, from the same date.

WAR SERVICES.

Nil.

Mr. ANGELO D'SOUZA, *Offg. Assistant Superintendent, 1st Grade.*

JOINED the Topographical Survey as 3rd class sub-Assistant, on the 19th February 1856, and was appointed to the Ganjam Topographical Survey; took part in the Survey of Sumbulpore and Boud Districts, and assisted in the Triangulation of the Coast from Pooree to False Point in 1857-58; promoted to 2nd class Sub-Assistant, on the 19th February 1859; suffered severely from jungly fever; took privilege leave for 3 months, one of which was cancelled on being transferred to the Assam Series; Trigonometrical Survey, 1st September 1859; carried on a minor series, with a view of fixing the position of Gauhati, and completed a Topographical Survey of the Cossya plateau of about 1,000 square miles in area on the scale of 4 miles to 1 inch; transferred to the Astronomical Party, Andaman Islands, on 23rd October 1861; promoted to 1st class Sub-Assistant on 8th January 1862; promoted to Senior Sub-Assistant on 18th September 1863; transferred to the Kattywar Party in October 1863; was employed in training the new hands for the Topographical Survey of that country under Captain, now Colonel, C. T. Haig, r.e. On account of the severe famine in Kattywar, the survey was placed in abeyance in 1864-65, and was then employed on the approximate work of the Triangulation of Nasik District, Bombay Presidency, under Lieutenant-Colonel D. J. Nasmyth, r.e., and in the following season 1865-66 was employed on the approximate work of the Triangulation of the Island of Bombay, and also in executing a number of traverses as basis for the Cadastral Survey of Bombay; promoted to Civil 2nd Assistant, junior grade, on 1st January 1865; promoted to Civil Assistant, 4th grade, on the reorganisation of the Department on 1st April 1866; was employed in Kattywar in 1866-67, on the resumption of that Survey under Captain C. T. Haig, r.e., and continued in the Party till 1869; promoted to Surveyor, 3rd grade, in September 1869; furlough from October 1869 to September 1870; transferred to the Guzerat Party on the 27th September 1870; promoted Surveyor, 2nd grade, on 1st December 1872; promoted Surveyor, 1st grade, on 1st September 1875; transferred to the Secondary Triangulation Party on 1st October 1883, and assumed charge of the Party on the 16th October 1883; promoted to Assistant Superintendent, 2nd grade, on the 1st October 1884; appointed to officiate in the 1st grade with effect from the same date.

Mr. G. B. SCOTT, *Offg. Assistant Superintendent, 1st grade.*

Statements of Services of Geological Survey Officers.

Corrected up to 1st January 1885.

Mr. HENRY BENEDICT MEDLICOTT, M.A., F.R.S., F.G.S.

ENGAGED by Dr. Oldham from the Geological Survey of Great Britain; joined appointment in India on 24th March 1854; in August 1854 appointed by Court of Directors as Professor of Geology, Roorkee College; re-attached to Geological Survey for the field season; 1854-55, Narbada Valley; 1855-56, Sub-Himalayas; 1856-57, Bundelkhand; 1857 to 1862, Sub-Himalayas; in October 1862 left Roorkee and rejoined the Geological Survey as Deputy Superintendent for Bengal; 1862-63, South Rewah; 1863-64, Behar; 1864-65, Assam; officiated as Superintendent from 21st August to 13th November 1864; leave on private affairs from 10th May to 9th November 1865; 1865-66, Central India and Rajputana; 1866-67, Chota Nagpur, Chhattisgarh, Sambalpur; placed in the 1st grade on the introduction of grading in May 1866; 1867-68, Garo Hills; 1868-69, Hazaribagh, Sirgajah, Sohagpur, Chanda, Mohpani; 1869-70, Satpuras; 1870-71, Bundelkhand, Narbada Valley; officiated as Superintendent from 20th July to 5th September 1870; sick leave, 13th June to 2nd December 1871; 1871 to 1873, Satpuras; officiated as Superintendent from 16th July 1873 to 15th December 1874; 1873-74, Garo Hills; 1874-75, Betul coal-field, Nimar, Nepal; 1875-76, Nimar, Jamu Hills; appointed Superintendent on 1st April 1876; 1876-77, Mohpani and Satpura coal-borings; 1877-78, Reh Committee, and Nahan; 1878-79, Office, Calcutta; 1879-80, Office, Calcutta; 1880-81, Nahan, and Office, Calcutta; 1881-82-83-84, Office, Calcutta; special leave from 9th May to 8th November 1884.

Mr. WILLIAM KING, A.B., D.SC. (*Honoris causa*.)

ENGAGED in England by Dr. Oldham, and joined appointment as Assistant on the Geological Survey on 4th March 1857; in May 1858 attached to Madras Party in the Nilgiri Hills and South Arcot; 1859, Trichinopoly and Tanjore; 1860, Salem and Coimbatore; 1861, Kadapah District; 1862, North Arcot, Kadapah and Nellore, arranged the rock collections in the Madras Central Museum; 1863, Madras, North Arcot and Nellore, delivered three public lectures at Nellore on the Geology of the District; 1864, Kadapah, Bellary and Karnul Districts, delivered a course of lectures on Geology at the Civil Engineering College, Madras; 1864-65, Kadapah, Karnul and Raichur Doab; 1865-66, Kadapah and Karnul Districts; placed in the 2nd grade on the introduction of grading in May 1866; 1866-67, Bellary District; 1867, 1868 and 1869, Kadapah and Kistna Districts; appointed Deputy Superintendent for Madras, 15th November 1868; furlough from 17th September 1869 to 16th December 1870; 1870-71, Raichur Doab and Bhima Valley; officiated in the 1st grade from 13th June to 3rd December 1871; 1871-72, Godavari District and Nizam's Territories; discovered Singareni coal-field; 1872-73, Godavari and Vizagapatam Districts; deputed to Vienna in joint charge of the survey collections at the Exhibition; officiated in the 1st grade from 19th September 1872 to 20th April 1875; 1873-74, Godavari and Kistna Districts; 1874-75, Wynad gold-field and Godavari District; promoted to 1st grade on 21st April 1875; 1875, 1876, 1877, 1878 and 1879, Godavari and Sironela Districts and Nizam's Dominions, also the Wynad gold-fields; 1880-81, Malabar Coast; furlough from 10th May 1881 to 9th July 1883; 1883-84, Chhattisgarh; Fellow of the Madras University, and Member of the Faculty of Engineering, 1884; officiated as Superintendent from 7th May to 12th November 1884.

Mr. ROBERT BRUCE FOOTE, F.G.S.

ENGAGED in England for the Geological Survey; joined as Assistant on the 28th September 1858, deputed to Madras; 1859, in Trichinopoly, South Arcot and Tanjore; 1860 and 1861, in Salem, Trichinopoly and South Arcot; delivered a course of public lectures on Geology at the Civil Engineering College, Madras; 1862, in Salem, Coimbatore, South Arcot and Chingleput, delivered a course of public lectures on Geology in the Civil Engineering College, Madras; 1863, North Arcot, Salem, Chingleput, arranged the palaeontological collections in the Madras Museum; 1864, in Chingleput and North Arcot; 1865, in Kadapah, Karnul, Nizam's Territory; 1866, in Karnul, Nellore; placed in the 2nd grade on the introduction of grading in May 1866; 1867, in Nellore, Karnul, Kistna; leave on medical certificate from 29th May 1867 to 22nd October 1868; 1868-69, in Kistna District and Nizam's Territories; 1869-70, in Bellary, Nizam's Territories, Kaladgi; 1870-71, in Bellary, Nizam's Territories, Kaladgi, Belgaum; 1871-72, in Nizam's Territories, Kaladgi, Belgaum, Ratnagiri, Kolhapur; 1872-73, in Bellary, Dharwar, Kaladgi, Sholapur; deputed to Vienna Exhibition in joint charge of the survey collections; officiated in the 1st grade from 16th July 1873 to 17th December 1874; 1873-74, in Kaladgi, Belgaum, Kolhapur, Dharwar; examined the Dambal gold region; 1874-75, in Nellore; 1875, 1876 and 1877, in Nellore and Kistna; promoted to the 1st grade on 1st April 1876; 1877, 1878 and 1879, Trichinopoly, Tanjore, Pudukotta, Madura; furlough from 13th May 1879 to 6th December 1880; 1880-81; Madura, Tinnovely, officiated as Deputy Superintendent from 7th December 1880 to 13th June 1881; appointed Deputy Superintendent from 14th June 1881; 1881-82, Tinnovely; held charge of the current duties of the Office of the Superintendent, Geological Survey, from 23rd July to 22nd October 1882; 1882-83, Madura and Kurnul; 1883-84, Kurnul, Hyderabad and Bellary; Fellow of the Madras University and Member of the Faculty of Engineering, 1884.

MR. FREDERICK RICHARD MALLET, F.G.S.

ENGAGED by Dr. Oldham in England; joined the Geological Survey as Assistant on the 12th February 1859, and took up work in the Raniganj coal-field; 1859-60, in the Khargpur Hills; in July 1860 made a trip to Tibet by Niti; 1860-61, Upper Sone Valley; in July 1861 made an excursion in Spiti; 1861-62, on the Upper Vindhyan in Bundelkhand and Rewah; 1862-63, on the Vindhyan in Mirzapur and Shahabad Districts; 1863-64, on the Vindhyan between Rewah and Saugor; June to September 1864, worked with Dr. Stolickza in Spiti and Rupshu; 1864-65, worked the Vindhyan boundary from Jabalpur to Barwai; from 10th May to 9th November 1865, officiated as Deputy Superintendent in Bengal; 1865-66, on the Vindhyan and crystalline rocks between Chunar and Tehri in Bundelkhand; 1866-67, through Bhurtpur, Alwar, Bundi and Guna to the Saugor District; 1867-68, the gneiss of Lower Bundelkhand; 1868-69, on the crystalline and transition rocks in the Mirzapur District; passed in the vernacular on 5th October 1868; on furlough for one year from 13th September 1869, with an extension on duty for three months and nine days to 21st December 1870; on his return journey stopped at Aden to report on the prospects of an artesian boring; 1871-72, in South Mirzapur and Rewah; officiated in the 2nd grade from 13th June to 3rd December 1871; officiated for three months as Curator of the Museum; during the recess seasons of 1871 and 1872, arranged and catalogued a large part of the mineral collections; promoted to the 2nd grade on 1st May 1872; 1872-73, on the crystalline and transition rocks of Northern Hazaribagh; recalled to arrange the mineral collection for the Vienna Exhibition; 1873-74, in the Sikkim Himalayas and Bhutan Duars; 1874, 1875 and 1876, in the Assam coal-fields; officiated in the 1st grade from 16th March to 25th April 1876; since 12th October 1875 has acted as keeper of the mineral collections, the systematic description of which involves much work in the laboratory; early in 1878 examined and reported on some coal and petroleum localities in Ramri, Cheduba and Baronga Islands; leave on medical certificate from 25th July 1879 to 22nd October 1880; 1880-81, Museum; officiated in the 1st grade from 23rd October 1880 to 24th January 1883; examined and reported on a new copper mine in British Sikkim; officiated as Deputy Superintendent from 25th April 1882 to 10th April 1883; promoted to the 1st grade on 25th January 1883 and appointed Deputy Superintendent on 11th April 1883; 1882-83, Museum and Jabalpur; 1883-84, Museum and Andamans; furlough from 2nd May to 3rd November 1884.

MR. THEODORE WILLIAM HUGHES HUGHES, A.R.S.M., F.G.S.

APPOINTED in England by the Secretary of State on 16th October 1862; joined the Survey as Assistant on the 11th November 1862; 1862-63, in the Sone Valley; 1863-64, the Jherria coal-field; 1864-65, the Bokaro coal-field; 1865, 1866, 1867 and 1868, the Káranpura, Deogarh, Karharbári, Ithkuri and Daltonganj coal-fields; 1868, 1869, 1870 and 1871, the Wardha Valley coal-fields; passed in the vernacular on the 3rd August 1868; reported for Government, North-Western Provinces, on roofing slates for barracks, Ranikhet, 1869; accompanied Governor General (Lord Mayo) during tour of Wardha Valley coal-field and opening of Mayo colliery, March 1870; reported for Government, Central Provinces, on lead ore at Sleemanabad, June 1870; pointed out over 20 sites for bore holes in the districts of Chanda and Wún—coal proved in all; also assisted officers of His Highness the Nizam to select positions; leave on medical certificate from 1st July 1871 to 8th November 1872; 1872-73, Bandar and Wardha coal-fields; on special duty with Mr. Bauerman, visiting the iron deposits of the Central Provinces; officiated as Deputy Superintendent from 9th November 1872 to 17th December 1874; during July to September 1873 made a trip in Tibet by Niti and Milam; in October 1873 reported on the Kumaon iron ores; in November 1873 reported for the Bengal Iron Company on the Raniganj Field; 1873-74, Wardha Valley coal-field; recommended and indicated sites for borings in the Bandar Field which proved coal; received thanks of Government, Central Provinces; reported for Messrs. Apear and Company on boring sites in the Raniganj Field, also for Messrs. Burn and Company on the Birbhun iron ores; 1874-75, the Pranbitha and Jangaon Valleys, and the Wún coal-fields; 1873-74-75, indicated more bore sites in Wún District; promoted to the 2nd grade from 21st April 1875; 1875-76, the Godavari Valley; visited the Mohpani coal-field, and the trial borings for coal at Kháppá and Moran River; accompanied the Superintendent during his observations of underground temperature; 1876-77, completed survey of the Kota-Maleri area; recommended borings for coal at Sandrapali,—Godavari River; reported for Bengal Coal Company on supposed occurrence of coal south of Karharbári Field; leave on furlough from 1st November 1877 to 14th October 1879; officiated in the 1st grade from 15th October 1879 to 6th December 1880; officiated as Deputy Superintendent for Bombay from 3rd April to 6th December 1880; 1879-80, 1880-81, 1881-82-83, South Rewah coal-fields; again visited Mohpani coal-field, and inspected new sinking, August 1880; officiated in the 1st grade and as Deputy Superintendent from 17th March 1881 to 7th June 1882; urged borings for coal at Umaria-Khalesar, Rewah State and in valley of the Johilla River, pointed out sites which proved coal over large area, January 1882; reported for Government, Central Provinces, on coal outcrops in Mahanadi, Jabalpur District, May 1882; leave on furlough from 8th June 1882 to 22nd February 1883; officiated in 1st grade from 23rd February to 10th April 1883; officiated as Deputy Superintendent from 23rd February to 10th May 1883; promoted to 1st grade on 11th April 1883; superintending Rewah coal explorations from 1st March 1883; 1883-84 Korea and Jhilmilli; Officiated as Deputy Superintendent from 29th April to 12th November 1884; in May 1884 reported for Messrs. Schœne, Kilburn and Co. on coal near Jainti river; received thanks of the Central India Agency; services placed at the disposal of the P. W. Department from 18th December 1884.

MR. FRANCIS FEDDEN, A.R.S.M., F.G.S.

ENGAGED in England by Dr. Oldham; joined the Survey as Assistant on the 1st October 1860; deputed to Burma; employed there until 1864; attached to the Salween surveying expedition in 1864-65; surveyed parts of Manbhun and Hazaribagh in 1865-66; transferred to Central Provinces in 1866-67; on private affairs leave from 4th May to 5th December 1867; engaged in

the survey of Cutch in 1867, 1868 and 1869; passed in the vernacular on 26th October 1869; surveyed parts of Central Provinces, East Berar, and the Nizam's Territories in 1869, 1870, 1871 and 1872; leave on medical certificate from 26th May 1872 to 22nd January 1874; officiated in the 2nd grade from 16th July 1873 to 17th December 1874; resumed work in the Wardha coal-fields, 1874; transferred to the survey of Sind, 1874, 1875, 1876 and 1877; officiated in the 2nd grade from 29th March 1875 to 24th October 1876; transferred to survey of Kattywar, 1877-78; officiated in the 2nd grade from 1st November 1877 to 23rd March 1878; promoted to 2nd grade on 24th March 1878; leave on furlough from 7th June to 20th November 1878; resumed work in Kattywar, 1878-79; officiated as Curator from 25th July 1879 to 22nd October 1880; officiated in the 1st grade from the 22nd August to the 14th October 1879, and from 3rd April to 15th October 1880; 1880-81, 1881-82, Kattywar; 1882-83, Kattywar, Guzrat and Museum; officiated in the 1st grade from 8th June 1882 to 22nd February 1883, and from 28th March to 10th May 1883; 1883-84, Museum; acted as Curator from 21st January to 7th March 1884; officiated in 1st grade from 29th April to 12th November 1884; acted as Curator from 29th April to 7th November 1884 furlough from 22nd November 1884.

MR. CHARLES AUGUSTUS HACKET.

ENGAGED in England by Dr. Oldham; joined the Geological Survey as Assistant on the 15th November 1861; 1861, 1862, and 1863, in the Sone Valley; 1864, 1865, 1866, and 1867, on the Vindhya in Central India; 1867, 1868, and 1869, on the Vindhya and Arvalis between Bhartpur and Neemuch; passed in the vernacular on 5th October 1868; 1869, 1870, 1871, and 1872, on the Transition and Gondwana Rocks in Jabalpur and South Rewah; 1872-73, Narsingpur and Hoshungabad; officiated in the 2nd grade from 3rd June 1873 to 15th December 1874; 1873-74, Rajputana; leave on furlough and medical certificate from 3rd August 1874 to 1st November 1875; 1875, 1876, 1877, 1878, and 1879, the Arvalis in Rajputana and Punjab; officiated in the 2nd grade from 16th March to 26th April 1876, and from 24th March 1878 to 13th June 1881; 1880-81, Rajputana, towards Neemuch and Oodeypore; promoted to 2nd grade from 14th June 1881; 1881-82, Rajputana; leave on furlough from 20th November 1882, to 17th November 1884; 1884, Rajputana.

MR. CARL LUDOLF GRIESBACH, F.G.S.

APPOINTED by the Secretary of State in England on 26th September 1878; joined as 3rd grade Assistant on 11th November 1878; took up the survey of the South Rewah coal-fields in November 1878; 1879, Himalaya; 1880, deputed to Afghanistan to report on gold at Kandahar and petroleum at Sibi; passed in the Vernacular on 15th September 1880; officiated in the 2nd grade from 13th March to 7th November 1880; officiated in the 2nd grade from 17th March 1881 to 24th January 1883; 1881, Kumaun, Himalayas, and Europe on duty; 1882-83, Garhwal and Himalayas; promoted to 2nd grade on 25th January 1883; accompanied Takht-i-Suleiman Expedition in December 1883; 1883-84, Punjab; attached to Afghan Boundary Commission; officiated in 1st grade and as Deputy Superintendent from 7th May to 7th November 1884.

WAR SERVICES.

On 6th March 1880 was deputed on special service under the orders of the General Commanding Southern Afghanistan; was present at the action of Girishk, 14th July, and the battle of Maiwand, 27th July; attached as Lieutenant to the 66th Regiment, Kandahar Field Force, Order No. 271, dated 29th July 1880, and was present throughout the siege of Kandahar and the battle of Kandahar, 1st September 1880; favourably mentioned in despatches; received the acknowledgments of the Government of India—medal and clasp.

MR. RICHARD DIXON OLDHAM, A.R.S.M.

APPOINTED in Europe by the Secretary of State on 6th November 1879; joined as 3rd grade Assistant on 17th December 1879; took up work in the Godavari Valley; 1880-81, Jaunsar and Sirmur; passed in the vernacular on 1st August 1881; 1881-82, on special service to Manipur; officiated in 2nd grade from 14th June 1881 to 10th April 1883; 1882-83 to 1883-84, Jaunsar and Andamans; promoted to 2nd grade on 11th April 1883.

MR. PRAMATHA NATH BOSE, D.SC. (Lond.), F.G.S.

APPOINTED in Europe by the Secretary of State on 13th May 1880; joined as 3rd grade Assistant on 30th July 1880; 1880-81, 1881-82, 1882-83, Lower Narbada Valley and Chhattisgarh; officiated in 2nd grade from 2nd March 1882 to 31st March 1884; promoted to 2nd grade from 1st April 1884; 1883-84, Chhattisgarh.

MR. THOMAS HENRY DIGUES LATOUCHE, D.A. (Camb.)

APPOINTED in Europe by the Secretary of State on 11th October 1881; joined in India as 3rd grade Assistant on 29th November 1881; 1881-82, Garo Hills; passed in the Vernacular on 5th June 1882; officiated in 2nd grade from 8th June 1882 to 17th November 1884; 1882-83 to 1883-84, Assam; officiated in 2nd grade from 22nd November 1884.

MR. EDWARD JAMES JONES, A.R.S.M.

APPOINTED in Europe by the Secretary of State on the 20th September 1883; joined in India as 3rd grade Assistant on the 29th December 1883; 1884, Korea, Jhilmilli, and Chhindwara; passed in the vernacular on 2nd June 1884; officiated in 2nd grade from 29th April to 12th November 1884.

MR. CHARLES STEWART MIDDLEMISS, B.A. (*Contab.*)

APPOINTED in Europe by the Secretary of State on the 20th September 1883; joined in India as 3rd grade Assistant on the 29th December 1883; 1884, Jaunsar and Kumaun; officiated in 2nd grade from 7th May to 7th November 1884; passed in the Vernacular on 6th October 1884.

MR. OTTOKAR FEISTMANTEL, M.D.

APPOINTED in Europe by the Secretary of State on 5th November 1874; joined in India as 3rd grade Assistant on 25th March 1875; took up work on the plant fossils of the Gondwana formation, upon which he has been principally engaged till now; passed in the Vernacular on 4th October 1875; appointed Palaeontologist on 10th March 1877; in 1875, 1876, and 1877, made short excursions to the Rajmahal Hills, the Karharbari, Raniganj, and the Satpura coal-fields; 1878, 1879, Office and Karharbari coal-field; 1880-81, Office and Hazaribagh, Lohardugga and Manbhium; 1881-82, Office and South Rewah; officiated in 1st grade from 25th April 1882 to 27th March 1883; leave on furlough from 28th March 1883.

MR. JULES SCHAUMBURG.

JOINED the Survey as Chief Draftsman on 12th April 1869; gazetted as Artist on 7th July 1874; officiated as Principal, Government School of Arts, Calcutta, from 5th June 1882 to 18th November 1884.

MR. WILLIAM ROBERT BION.

JOINED the Survey as Librarian on 12th December 1870; appointed Head Clerk as well as Librarian on 1st August 1873; appointed Registrar on 31st December 1878; compiled and carried through the press a catalogue of the books in the library of the Geographical Survey of India, 1884.

LALA KISHEN SINGH.

JOINED the Survey as an Apprentice on 7th January 1874; 1874-1876, Museum, Calcutta; 1876-77, 1877-78, and 1878-79, Sub-Himalaya; appointed Sub-Assistant on 1st April 1879; 1879-80, Punjab; 1880-81 to 1883-84, Gwalior; furlough from 1st October 1884.

LALA HIRA LAL.

JOINED the Survey as an Apprentice on 7th January 1874; 1874 to 1876, Museum; 1876-77 Sind; 1877-78, Satpura and Museum; 1878-79, Museum and Sirgujah; appointed Sub-Assistant on 1st April 1879; 1879-80, Museum; 1880-81 to 1882-83, Museum and South Rewah; 1883-84, Korea, Jhilmilli and Chhattisgarh.

MR. THOMAS RAMSAY BLYTH.

JOINED the Survey as Museum Assistant on 1st March 1884.

Index to the Statements of the Services of Officers in the Survey of India.

A		PAGES
Andrew, Major D. C.	Survey of India	6
B		
Badgley, Lieut.-Col. W. F.	Survey of India	7
Baird, Major A. W.	Ditto	11
Barrett, E. C.	Ditto	14
Barron, Major W.	Ditto	4
Benvan, Major R.	Ditto	14
Bion, W. H.	Geological Survey	24
Blyth, T. R.	Ditto	24
Bose, P. N.	Ditto	23
Burrard, Lieut. S. G.	Survey of India	20
C		
Carter, Major T. T.	Survey of India	3
Coddington, Lieut. F.	Ditto	4
Cole, W. H.	Ditto	10
Cooke, G. H.	Ditto	15
Cowan, Major S. H.	Ditto	13
D'Souza, A.	Ditto	20
D		
DePrée, Col. G. C.	Survey of India	1
D'Souza, A.	Ditto	20
F		
Fedden, F.	Geological Survey	22
Feistmantel, O.	Ditto	24
Footo, R. B.	Ditto	21
G		
Gore, Capt. St. G. C.	Survey of India	16
Griesbach, C. L.	Geological Survey	23
H		
Hacket, C. A.	Geological Survey	23
Haig, Col. C. T.	Survey of India	2
Heaviside, Major W. J.	Ditto	5
Herschel, Lieut.-Col. J.	Ditto	2
Hill, Major J.	Ditto	9
Hobday, Capt. J. R.	Ditto	17
Hodgson, Lieut. G. B.	Ditto	20
Holdich, Major T. H.	Ditto	8
Horst, H.	Ditto	10
Hughes, T. W. H.	Geological Survey	22
Hutchinson, Major H. S.	Survey of India	13
J		
Jackson, E. J.	Survey of India	16
Jackson, Lieut. H. M.	Ditto	19
Jones, E. J.	Geological Survey	24
K		
Kelly, Mr. F. W.	Survey of India	19
Klug, W.	Geological Survey	21
N		

INDEX TO THE STATEMENTS OF THE SERVICES OF OFFICERS.

L

	PAGES
Lala Hira Lal	Geological Survey 24
Lala Kishon Singh	Ditto 21
LaTouche, H. D. T.	Ditto 23
Longe, Lieut. F. B.	Ditto 18

M

Macedonald, Bt. Col. D	Survey of India 3
Mallet, F. R.	Geological Survey 22
McCullagh, Major J. R.	Ditto 11
McGill, J.	Ditto 13
Medlicott, H. B.	Geological Survey 21
Middlemiss, Mr. C. S.	Ditto 24

O

Oldham, R. D.	Geological Survey 23
-----------------------	--------------------------------

P

Patterson, Mr. W. H.	Survey of India 18
Pollen, Lieut. W. H.	Ditto 19
Pullan, Lt.-Col. A.	Ditto 6

R

Rogers, Major M. W.	Survey of India 9
Ryall, E. C.	Ditto 17

S

Saudeman, Major J. E.	Survey of India 7
Schaumburg, J.	Geological Survey 26
Sconce, Lieut.-Col. J.	Survey of India 1
Steel, Major E. H.	Ditto 13
Strahan, Brevet Major C.	Ditto 4
Strahan, Major G.	Ditto 3

T

Talbot, H. B.	Survey of India 10
Talbot, Lieut. Hon'ble M. G.	Ditto 18
Tanner, Bt. Col. H. C. B.	Ditto 5
Thuillier, Bt. Lieut.-Col. H. R.	Ditto 2

W

Walhab, Lieut. R. A.	Survey of India 8
Waterhouse, Major J.	Ditto 6
Wilkins, Lt.-Col. W. H.	Ditto 12
Wilner, Major J. R.	Ditto 15
Woodthorpe Brevet Lt.-Col. R. G.	Ditto 15