

Government of Madras.

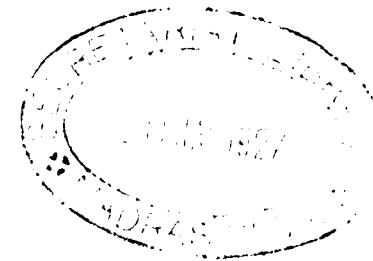
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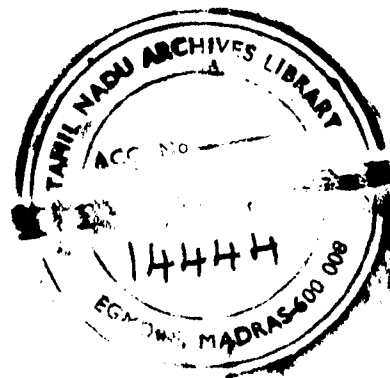
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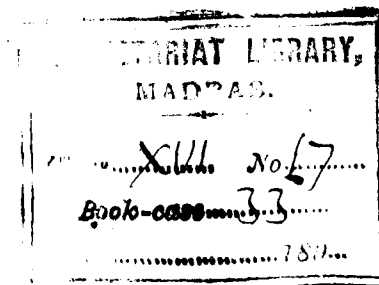


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MEMORANDUM.



I HAVE lately been favored with a copy of a paper relating to the Civil Service written in March last by Mr. Maclean for the information of the Chief Secretary. That paper deals partly with the actual condition of particular men in the service at the end of 1877 as compared with figures taken from the report of the 1876 Government of India Committee and partly with the general prospects of the service deducible from calculations of the position of representative men. As regards the former it is already indicated in Mr. Maclean's paper that this is the least important part of the matter. I wish however to repeat that warning. No reliable conclusion can be drawn from an observation of the condition of individual members of the service at one particular time, even were that observation correctly made in itself and by comparison with correct standards. That part of the paper which deals with the future is founded on a statement published by my brother, Mr. H. E. Stokes, some three years ago in the *Madras Mail*. This was stated by him to be only approximate, *i.e.*, calculated by a method giving only an approximately correct result, and as stated below in paragraph 28, there seems to be good reason to believe that the rates used in its calculation are materially too fast. Mr. Maclean's paper, as he himself points out, understates the case; in my opinion it does so most materially.

2. It is now some time since my attention having been drawn to the state of the service through some investigations which I had made for other reasons, I determined to endeavor to collect and work out, as far as I could, the information bearing on the subject and to submit the results at which I might arrive to the service, leaving it to them to decide in what their grievances, if any, lay, and what action should be taken in order to obtain redress. The results of my investigations I have embodied in this Memorandum.

3. Mr. H. E. Stokes, in his Memorandum on the Civil Fund, dated 9th March 1874, remarks: "Notwithstanding all that has been said of the deterioration of the prospects of the service in recent years, it can be shown that the average emoluments of the service have not declined, but on the contrary increased considerably during the last twenty-five years." Subjoined is a table illustrating the above remark and taken partly from that by which it is supported in the Memorandum:—

Years.			Average Strength.	Average Emoluments* of the Service.	Average Income of each Member.	Years.			Average Strength.	Average Emoluments* of the Service.	Average Income of each Member.
From	To					From	To				
1825	1829	...	202.4	34,26,153	16,928	1860	1864	...	171.4	26,24,174	15,310
1830	1834	...	219.8	36,59,575	16,650	1865	1870	...	184.0	27,43,241	14,909
1835	1839	...	213.0	34,08,995	16,005	1871	1874	...	166.6	25,56,679	15,346
1840	1844	...	204.8	31,51,523	15,388	1875-76	...	...	160.7	25,08,760	15,611
1845	1849	...	196.8	26,54,450	13,488						
1850	1854	...	188.2	28,08,435	14,923						
1855	1859	...	183.4	28,35,528	15,461						

* NOTE.—Exclusive of absentee allowances. The figures for the years from 1825 to 1859 are taken from the Memorandum above referred to; those for the years from 1860 to 1876 from my own tabulations.

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Though the remark is justified by the facts shown in the above table, it will be seen that, though improving between the years 1845 and 1859, the money prospects of the service have been stationary since the latter date, and are not now as good as they were in 1825: I say money prospects because the improvement of late years is due to a decrease in strength amounting to 26.5 per cent. on the maximum average strength, not to increase in the total emoluments drawn, *i.e.*, is due to a narrowing of the sphere of usefulness of the service, or to its deterioration as a career. It may not be claiming too much for the service to assert that at any rate in inducing men to compete for entrance to it, this is an important factor.

4. But though the service, as a whole, may have no grievance apart from the consideration last dwelt on, it by no means follows that individual members or classes within it have not.

5. It may be assumed that, if owing to defective recruitment, or other cause entirely under the control of Government and beyond that of the service, the rate of promotion of any part of the service is unreasonably retarded compared with that of the men similarly circumstanced who went before, the members whose promotion is so retarded, have a valid grievance, and one which calls for redress. The points which this Memorandum is designed to illustrate mainly are—

1stly.—The existence and extent of the retardation in permanent and acting promotion.

2ndly.—The effect of it in the past on the emoluments of the members of the service whose promotion has been retarded.

3rdly.—The causes which led to or have modified it.

4thly.—The probable course of promotion in the future and its effects on the emoluments of the service.

5thly.—Some other matters connected with the service:

1. The mode of its recruitment.

2. The remedies granted in like cases.

6. The first four points are established in the statements appended. The comments made in this paper on the statements are designed merely to be explanatory of them or to bring out into prominence the points of general importance established in them, and generally the object aimed at has been to ascertain whether the service or any members of it have a grievance, and if so, what it is, not to prove that a grievance exists.

7. Before proceeding to consider the results appearing in the statements relating to the past, it is necessary to explain that they are arrived at from tabulations made from lists of the service for the 30th September in each year of the twenty-five from 1852 to 1876 inclusive. Experience has shown that it would have been better had the 1st of January been the date chosen, but the 30th September was taken because it was the latest date to which facts untainted by the disturbance to the ordinary course of promotion, &c., incident on the famine, could be obtained; because it was the date nearest to that on which the majority of the men brought under observation began their service;* and because it was the end of a quarter for which alone the required information was available. The period subsequent to September 1876 has been excluded because the state of promotion, &c., has been entirely abnormal therein.

* The Haileybury men numbering 229 out of 355 observed, began their service as a rule in the early part of December and July shortly after the terms closed, *i.e.*, about three months and nine months before observation, while the Competitive men numbering 126, *i.e.*, those appointed in and since 1860, began their service on dates varying from the middle of August to the end of November.

owing to the stoppage of leave rendered necessary by the famine. That the state of things set out is that up to the 30th September 1876 only is a fact which it is of the greatest importance to remember in considering the results worked out.

8. The results for the period which has passed since the abovementioned date in a similar form to those now worked out can, if it is considered necessary, be hereafter laid before the service. It may safely be asserted, however, that any grievance which exists has been intensified not modified during the period referred to.

9. In making the subjoined tabulations I have throughout observed the following rules:—

Appointments have been classed as Civilian appointments, called for brevity C.A. appointments; *i.e.*, appointments to which Civilians alone can be appointed; non-existent Civilian appointments called N.E.; *i.e.*, appointments of the above kind not now existing; and Non-Civilian called N.C. appointments; *i.e.*, appointments to which Civilians in common with others may be appointed. The pay of an appointment includes the allowances drawn in respect of it on privilege leave, *i.e.*, a man on privilege leave is held to be on active service. It includes pay as Agent to Government and the special allowance formerly drawn for the charge of the Treasury at Masulipatam, but does not include house-rent, fixed tentage, leave allowances other than privilege leave allowances, or pay as "Translator," as "Protector of Emigrants," as Secretary to the Civil Fund or other body, or allowances for special duty. A man is graded as regards appointments on the pay of his substantive appointment and is placed in the grade to which such pay is nearest. When the substantive appointment held was one, now non-existent, and the holder acted in a similar appointment, or in a non-civilian appointment, he has been counted as absent from the regular line only in respect of his substantive appointment, and he has been graded on the pay of that appointment. A Civilian absent on special duty when he vacates his appointment, is treated in all respects as a man employed substantively in N.C. appointment of a value equal to the entire emoluments drawn for the duty, but when he does not vacate his appointment he is shown as acting in a N.C. appointment, the extra allowance drawn, if any, being shown as his acting allowance. If he draws no extra allowance, he is still shown as acting but drawing no extra allowances. A man of one grade in the regular line acting in a non-existent appointment of the same pay, is shown as absent acting but drawing no acting allowance—*e.g.*, A Judge acting in a non-existent Judgeship is shown as acting in N.E. appointment, but draws no acting allowances. A man holding substantively a N.C. appointment and absent on leave, is shown as absent in his appointment, but no account is taken of the fact that he is on leave, as it in no way necessarily influences promotion in the service. In 1855 the Kurnool Agency was abolished, and the Collectorate created. In the same year the Guntoor Collectorate was abolished. In the tabulation for the years 1852, 1853, 1854, and 1855 the Guntoor Collectorate has been taken as existing. Though the Judgeship of Tranquebar was abolished in 1876, as it has again been revived, it has been tabulated as an existing appointment throughout.

1stly.—The existence and extent of the retardation of promotion.

10. *Statements Nos. I, II, III, and IV.*—In Statements Nos. I and II the retardation of substantive promotion is shown; in Nos. III and IV of acting promotion. Nos. II and IV are merely readings of I and III respectively.

11. *Permanent promotion.*—Taking first the promotion in Civilian appointments we find that the men appointed since 1862 attain the higher grade of Assistant's pay

sooner than the men who went before them. This is due to three causes;—first, because ~~studentship~~ has been abolished; the study formerly done as a member of the service in this country is now done at home and before admission, the position as regards pay of a man now entering the service being that of a passed student, a state usually attained in former years in from twelve to eighteen months of landing: second and mainly, because Government of late years grant the increased allowance of 175 Rupees a-month to an Assistant on his passing his Second Standard almost as a matter of course; and, thirdly, because the legal limit of salaries fixed under 33 Geo. III. c. 52, s. 57 and 58 Geo. III. c. 155, s. 82 is now relaxed. This cause acted by preventing the grant above referred to. Taking next the Head Assistant grade we find, in the twelfth year of service, for example, that of the men appointed since 1865 none had attained the rank on the 30th September 1876, while of those appointed in 1863 and 1864, 46·3 per cent. were confirmed in it; whereas of the men appointed prior to 1862 from 56·2 to 58·0 per cent. attained the rank within their sixth and seventh years of service. At the higher years of service the percentage of men appointed prior to 1862 in the rank is small, only because the bulk of the men had passed into higher grades. In the Sub Collectorate grade none of the men appointed since 1865 were confirmed in 1876 though in their eleventh year; of the men appointed in 1863-64 but 9·5 per cent. were so, while of the men who were appointed prior to 1862 40·3 per cent. had attained the rank. In the twelfth year the contrast is perhaps more marked, since but 14·2 per cent. of the 1863-64 men were Sub-Collectors at fourteen years' service against 43·6 per cent. in the years before. Again whereas some men of those appointed prior to 1862 attained the 1,500 Rupees grade at their seventh year of service, the 1863-64 men only passed into it in their twelfth; and, lastly, though 6 per cent. of the men appointed before 1862 became Collectors at their eleventh year of service and 9·9 per cent., a not inconsiderable percentage, were so at fourteen years; of the men appointed since that year none had attained the rank. The above instances have been selected merely as examples; throughout it is clear that the men appointed since 1862 had gradually fallen behind.

12. Turning to the appointments not now existing we find much the same state of things. As strict a comparison cannot here be made as in the other cases, for the appointments in question consist mainly of the Subordinate Judgeships which were taken away from the service about the year 1861. The statement however shows that the years of service, on which the loss mainly falls, are from the tenth to the fourteenth, or that the promotion of every man entering the service since 1861 has been, or is being, up to his fourteenth year retarded proportionately to the number of appointments lost.

13. In the N.C. appointments in the later years there does not appear any very great deficiency, nor was any to be looked for; since the extent of employment in this case depends only on the fitness of the men to be employed which may be assumed constant throughout the whole period under review. The large percentages in the years prior to 1865 in the tenth and eleventh years of service, are due to the smallness of the number of men under observation.

14. *Acting promotion, Statements III and IV.*—In regard to acting promotion which of course begins with the Head Assistant's grade, the first noticeable fact is the small percentage of men appointed since 1862 who acted in the grade in their second and third years as compared with those appointed before that year. Since at this period the conditions are equal the promotion of the former class has been slower by two years. In the fourth year the percentages are more equalized, and in every subsequent year the percentage of the more recently-appointed men acting is larger in an increasing degree, and more so in the case of those appointed between 1865 and 1869 than in the case of those appointed in 1863-64. In the eighth year a decline sets in, till the

men appointed prior to 1862 pass entirely out of the grade in their tenth year of service while those of 1863-64 and 1865-76 continue to their 12th, *i.e.*, up to the period when the observation closes. But the larger number of men so acting is not due to increased opportunities and to their better position, but to the retardation of their substantive promotion already shown in Statements I and II. The effect of the same cause on the course of promotion in the Sub Collectorate grade is very much similar. In this grade in the case of the men appointed in 1863-64 the point of equalization of the percentages was reached at the eighth year, of the men appointed in 1865-76 in the ninth: the acting promotion of the former has been retarded from 90 per cent. to nothing in a gradually diminishing degree throughout four years, that of the latter throughout five. Thus the position of the 1863-64 men was worse than that of those of, and before the year 1862 and that of the 1865-76 men was gradually becoming worse still. In the Collectorate grade again, there is a difference of four and seven years in the time of the first appointment to act, of the men of before 1862 and of those of 1863-64 and 1865-76 respectively; none of the latter have yet become Acting Collectors; while the promotion of the former since they attained the rank has been more than 50 per cent. worse than that of the men who preceded them. In short the course of the acting promotion of the men appointed since 1862, may be summed up by saying, that they have acted much more and longer in lower appointments than those who went before them.

2ndly.—The effect of the retardation of promotion on the emoluments of the Service in the past.

15. *Statement No. V.*—This statement has been calculated with reference to the number of men on active service, *i.e.*, of men not on leave other than privilege leave. No account of leave allowances therefore has been taken in it. The course of promotion as shown in it appears, as was to be expected, the same as that shown in Statements I to IV; for instance it shows that the substantive promotion in the regular line of the men appointed since 1865 up to 30th September 1876, had never gone beyond that of Passed Assistant. The employment of men appointed in and before 1862 has not been abnormal, and they have benefited much in acting allowances. This is due to the large concessions made as regards such allowances during the twenty-five years under review. The changes in the rates are shown in the annexed statement which is not intended to be exhaustive but merely to contrast the cases most frequently occurring:—

Officer acting.	Appointment acted in.	From 1843 to 1855.		From 1856 to 1863.		From June 1868 to November 1869.		From November 1869 to 30th September 1876.	
		Mode of calculating Acting Allowance.	Amount of Acting Allowance.	Mode of calculating Acting Allowance.	Amount of Acting Allowance.	Mode of calculating Acting Allowance.	Amount of Acting Allowance.	Mode of calculating Acting Allowance.	Amount of Acting Allowance.
Collector or Judge.	High Court and Member of Board of Revenue.	Ten per cent. on 2,000 Rupees of pay of the appointment acted in, and five per cent. on the remainder; subject to the minimum set out below. A servant out of employ drew an acting allowance of 25 per cent. of the pay of the appointment acted in.	Rs. A. P. 304 2 8 250 13 4 216 10 8 216 10 8 553 5 4 { 140 0 0 140 0 0 140 0 0 350 0 0 116 10 8 116 10 8 291 10 8 100 0 0 100 0 0 291 10 8 216 12 0 35 0 0	Twenty per cent. on 2,000 Rupees of pay of the appointment acted in, and ten per cent. on the remainder; with a maximum of full pay of the appointment acted in, and the minimum set out below. A servant out of employ drew an acting allowance of 50 per cent. of the pay of the appointment acted in.	Rs. A. P. 608 5 4 501 10 8 433 5 4 433 5 0 1,166 10 8 333 5 4 280 0 0 280 0 0 700 0 0 333 5 4 333 5 4 553 5 4 200 0 0 200 0 0 291 10 8 216 12 0 145 13 4 35 0 0	Thirty per cent. on 2,000 Rupees, and the remainder of the pay of the appointment acted in; provided the sum so calculated was not less than two-thirds of the difference between the pay of the officer acting, and that of the appointment acted in; with a maximum of full pay and the minimum acting allowance set out below. A servant out of employ drew 50 per cent. of the pay of the appointment acted in.	Rs. A. P. 1,416 10 8 683 5 4 777 12 6 666 10 8 1,166 10 8 333 5 4 444 7 1 583 5 4 700 0 0 350 0 0 427 12 5 553 5 4 308 5 4 200 0 0 200 0 0 400 0 0 320 0 0 250 0 0	A uniform rate of twenty per cent. on the pay of the appointment acted in; provided the sum so calculated is not less than two-thirds of the difference between the pay of the appointment the incumbent of which is acting, and that of the appointment acted in; with a maximum of full pay of the appointment acted in and the minimum set out below.	Rs. A. P. 1,416 10 8 603 5 4 777 12 5 632 3 7 1,166 10 8 333 5 4 444 7 1 583 5 4 700 0 0 288 14 3 427 12 5 553 5 4 200 0 0 200 0 0 400 0 0 320 0 0 250 0 0
Sub-Collector.	Collectorate or Judgship.								
Do.	Do.								
Do.	Do.								
Sub-Collector.	Sub-Judgship.								
Head Assistant.	Sub-Collectorate.								
Do.	Head Assistantship.								
Minimum Acting Allowance.	Drawn by an Assistant acting as Head Assistant.								
Allowance of a servant out of employ.									

16. As the increased acting allowances granted in 1868 were introduced simultaneously with the rule permitting the retention of appointments on two years' furlough, it may have been intended, or may be argued that it was intended to compensate the Juniors in that way for the substantive promotion which they lost: this object has certainly not been attained; and for the reason that from the principle of calculation adopted for fixing the allowances, the most material enhancement occurs in the Collectorate and higher grades which suffer least from the rule, while the lower grades, in which the men of less than ten years' service of course are and which suffer therefore the most, have not benefited appreciably, or at all.

17. *Deductions from Statements Nos. I to V.*—In the following statement I contrast the years of service at which the men appointed during the several periods under comparison, entered and quitted each rank, and in which the number of men in the rank was at a maximum:—

Years of Appointment.		Head Assistant.			Sub Collector.			Collector.			3,000.			4,000.			5,000.		
From	To	Entered.	Attained a Maximum.	Quitted.	Entered.	Attained a Maximum.	Quitted.	Entered.	Attained a Maximum.	Quitted.	Entered.	Attained a Maximum.	Quitted.	Entered.	Attained a Maximum.	Quitted.	Entered.	Attained a Maximum.	Quitted.

Substantive Promotion.

Before 1865	1865	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1864	1863	..	4	10	..	6	14	..	..	..	..	..	..	..	..	..	..	..	..
1862 and after	..	2	5	16	4	10	25	7	18	39	16	30	39	15	36	41	26	..	41
General Average	..	2	5	16	4	11	25	7	18	39	16	30	37	15	36	41	26	..	41

Acting Promotion.

Before 1865	1865	..	2	8	..	6	12	..	..	..	..	..	..	..	..	..	..	..	..
1864	1863	..	2	7	13	4	13	..	9	14	..	..	..	..	..	..	..	..	..
1862 and after	..	1	4	11	4	7	17	6	13	27	18	26	36	23	29	33	31	32	32
General Average	..	1	4	13	4	9	17	6	15	27	18	26	36	23	29	33	31	32	32

I have held that the men of any years of service attain a certain rank substantively when the number of men employed in that rank and those above it, ceases to be less than the numbers employed in the ranks below; and acting promotion in the rank when the percentage of men acting relatively to the number of men on active service in that year is a maximum. A man passes out of a rank substantively only by substantive promotion, but may pass out of observation as acting in a particular

Office.	PERMANENT.		ACTING.	
	Years of Service.		Years of Service.	
Head Assistant Collector..	..	5	..	4
Sub-Collector	..	11	..	9
Collector	..	18	..	15
Board of Revenue	..	30	..	26
First Member	..	36	..	29

rank, by permanent as well as acting promotion. The maximum has not been attained yet in some ranks by the more lately-appointed men. It will be seen however that the experience of the Madras Service hitherto shows that the men obtain their permanent and acting promotion as in the marginally-noted table. It will be observed from Statement No. I that it cannot be said that any year of service attain to the 5,000 Rupees rank, i.e., become members of Council. The above rate of promotion does not seem inordinately fast.

18. *Statement No. VI.*—This statement is but a series of deductions from the above, the exact nature of which cannot be more concisely put than in the statement itself. From it the 1865 men appear the worst off in the service. It must be remembered that loss means that so much less in pay has been drawn by the men affected than they were entitled to expect judging from the experience of the promotion of men of

equal standing in past years, and gain that so much more pay has been drawn. It may be well to point out that the correct standard by which to judge the position of men who have covenanted to serve in Madras, is not the position or prospects of the men of like standing in other Provinces, but that of men of like standing in the Madras Presidency in past years. No just comparison can be made where different scales of pay prevail—where the extra allowances, as tentage, house-rent, &c., are different—where the advantages of station, climate and position, the cost and style of living, the demands of social custom, the character and weight of work, in short all the conditions of service are different.

19. But there is another way in which the small emoluments drawn by the men appointed since 1862 press on them, viz., in the reduced furlough allowances which they draw—reduced that is as compared with what they would draw if in receipt of salaries on the same average as the men who went before them. Below is given a table in which the furlough allowances of the men of over nine years' service, when the minimum is first passed, appointed since 1862, are contrasted on the above principle with what men of that standing ought, or might have drawn. The rules are that an officer when on furlough is granted allowances at the rate of half of his average salary for the three years previous to the date on which he gives up office; the maximum leave allowance is £250 a-quarter or Rupees 833½ a-month; the minimum £125 a-quarter or Rupees 416½ a-month; salary means the sum of pay and acting allowances; it does not include house-rent, tentage or travelling allowances. Pay signifies substantive pay:—

Years of Service.	YEARS OF APPOINTMENT.		Average Salary at each Year of Service.	Average Salary throughout the Year.	Annual Salary.	Half Average Salary for the previous three Years at each Year.	Furlough Allowance in Rupees per Annum.	Furlough Allowance in Sterling at 1s. 9d. the Rupee when above Minimum.	Loss per Annum.
	From	To							
6 {	70	65	Rs. 668·8	Rs. 694·4	Rs. 8,332·8	..	..	..	..
	64	63	697·7	724·4	8,692·8	..	..	..	..
	62	46	792·9	838·7	10,060·4	..	..	..	..
7 {	69	65	730·0	754·5	9,054·0	..	..	..	..
	64	63	751·2	794·6	9,535·2	..	..	..	..
	62	45	834·6	923·8	11,085·6	..	..	..	..
8 {	68	65	779·0	792·6	9,511·2	..	..	..	..
	64	63	838·0	900·2	10,802·4	..	..	..	..
	62	44	963·1	989·9	11,878·8	..	..	..	..
9 {	67	65	806·2	872·5	10,470·0	4,483·0	5,000	500	..
	64	63	962·4	1,009·5	12,114·0	4,838·4	5,000	500	..
	62	43	1,016·8	1,066·7	12,536·4	5,504·2	5,504·2	500	..
10 {	66	65	938·9	921·5	11,058·0	4,839·2	5,000	500	17·7
	64	63	1,056·6	1,081·7	12,980·4	5,408·6	5,408·6	500	17·7
	62	42	1,116·7	1,208·4	14,500·8	5,916·8	5,916·8	517·7	..
11 {	65	65	904·1	852·0	10,224·0	5,173·2	5,173·2	500	52·9
	64	63	1,100·8	1,145·5	13,758·0	5,982·8	5,982·8	523·4	29·5
	62	41	1,299·2	1,386·1	16,621·2	6,319·3	6,319·3	552·9	..
12 {	65	65	800	..	..	5,292	5,292	500	136·6
	64	63	1,180·3	1,226·7	14,726·4	5,475·3	5,475·3	566·5	70·1
	62	40	1,471·1	1,506·5	18,006·0	7,276·4	7,276·4	636·6	..
13 {	64	65	1,267·2	1,282·6	15,391·2	6,909·3	6,909·3	604·6	111·8
	62	39	1,540·0	1,560·5	18,696·0	8,188·9	8,188·0	716·4	..
14 {	63	63	1,298·1	..	..	7,311·6	7,311·6	638·3	171·0
	62	38	1,561·0	1,562·0	18,834·0	7,249·3	7,249·3	809·3	..
15	61	37	1,663·6	..	..	..	..	..	..

3rdly.—The causes which have led to or modified the retardation in promotion.

20. The causes which have led to the very serious retardation of promotion above dwelt on are these:—

1st.—Over-recruitment in the years 1863 and 1864.

2nd.—The abolition of appointments.

3rd.—The change in the furlough rules by which the retention of appointments, while on furlough for a less period than two years was permitted.

21. How abnormal was the recruitment in 1863-64 may be gathered from the following table:—

Years.	Average Recruitment.	Years.	Average Recruitment.	Years.	Average Recruitment.
1875-76	7·0	1865-66	2·5	1855-56	9·0
1873-74	4·0	1863-64	24·0	1853-54	3·5
1871-72	2·0	1861-62	10·5	1852	7·0
1869-70	3·5	1859-60	3·0		..
1867-68	6·5	1857-58	8·0		..

22. Though there was the large recruitment of nineteen in 1862 still for reasons to be presently explained, the promotion of the last man of the year, if retarded has not been so appreciably. It served however to right the scale which the overwhelming numbers brought in 1863-64 caused to kick the beam. The causes which neutralised the recruitment of 1862 were under-recruitment in the four years preceding 1862, during which but eleven men were admitted, and a very great enhancement of the rate of decrement during the years immediately preceding, which attained a maximum in the year 1859, and continued slightly abated to 1866, and which was due principally to the passing out of the service of the men of a block appointed between the years 1829 and 1832. The enhancement of the rate of decrement is shown in the annexed table:—

Years.	Strength on 30th September.	Decrement during the Year.	Exposed to risk at the Year.	Total triennially.	Total Decrement.	Percentage rate of Decrement.
1852	188	5	91.5	448.0	21	4.68
1853	186	8	180.5			
1854	182	8	176.0			
1855	188	9	176.5	529.5	28	5.28
1856	183	8	177.0			
1857	188	11	176.0			
1858	180	9	174.0	498.0	30	6.02
1859	171	10	166.0			
1860	167	11	158.0			
1861	158	11	151.5	467.0	28	5.99
1862	166	11	151.0			
1863	182	6	165.5			
1864	197	9	182.0	544.0	30	5.51
1865	193	11	185.0			
1866	182	10	177.0			
1867	179	5	173.0	515.0	20	3.89
1868	180	10	172.0			
1869	175	5	170.0			
1870	172	5	168.5	491.5	21	4.27
1871	169	7	164.5			
1872	164	9	158.5			
1873	161	6	155.0	462.5	19	4.11
1874	159	6	154.0			
1875	161	7	153.5			
1876	160	7	154.5	154.5	7	4.53

23. *Statement No. VII.*—In this statement will be found the history of the permanent appointments filled on the 30th September of each year from 1852 to 1876. In compiling it, no account has been taken of the fact, that the holder of an appointment was on leave, if by going on leave he did not vacate his appointment. This it is of importance to remember in comparing the figures given in this statement and elsewhere in this Memorandum. It will be seen that as compared with 1852, the service had up to 30th September 1876 lost ten appointments of a monthly value of 17,200 Rupees, and the number of non-civilian appointments filled by Civilians, had decreased by four of a monthly value of 7,732, total fourteen appointments valued at 24,932. If however the comparison be made with 1858, the year in which the appointments filled by Civilians attained a maximum, the loss was sixteen Civilian appointments valued at 27,424 Rupees a month and eleven non-civilian appointments valued at 24,855, total twenty-seven appointments valued at 52,279 Rupees a month. The losses in the Civilian appointments are mainly the Subordinate Judgeships abolished between 1860 and 1861 and the gradual reduction in the number of Small Cause Court Judgeships held by Civilians, which have now been entirely taken away from the service. They were appointments of the 1,500 Rupees grade. The result of the abolition of appointments of that grade, is that the loss falls almost entirely on the men of the grade of Sub-Collector and Head Assistant and delays their promotion nearly three years (*vide*

paragraph 52 following). The loss in first-class appointments in the regular line has been trifling. If necessary I can give in each case the exact nature of the change shown in the statement, but to set them all out in detail seems needless for the present purpose.

24. From column 24 of the statement the effect of the change in the furlough rules by which the retention of appointments while on furlough for a less period than two years was permitted will be seen; whereas under the old rules 17.1 per cent. of the strength were out of employ in 1852, but 1.9 were so in 1876; in other words the men of less than ten years' standing, when furlough could under the old rules be first availed of, have lost since 1868 on an average (say) twenty-four appointments, and the men above that standing a number roughly proportioned to their standing. So far as promotion was concerned the rule amounted to the removal of the number of men on furlough below a certain minimum from the list of the service as effectually as if they were dead, or had retired; or, to put it another way, twenty-four appointments of the kind usually held by men above ten years' service ought to have been given to the juniors of the service to compensate for the abolition of the rule. The change was introduced just when it would affect the permanent promotion of the men of 1863 and 1864.

25. How the last two causes combined, but more especially the latter, acted will be seen from the percentages of strength employed in graded and ungraded appointments given in columns 21 and 22 of the statement; while the percentage of strength employed in graded appointments was in 1876 very much what it was in 1852, the percentage of strength in ungraded appointments has risen from 22.3 in the latter to 35 in the former, having attained on the one hand, a minimum of 12.7, and on the other a maximum of 38.1. From this statement and that set out above in paragraph 23 may be gathered the conditions which led the Government into the mistake of the over-recruitment of 1863 and 1864;—first, a very much enhanced rate of retirement due to the fortuitous constitution of the service; second, the maximum number of appointments; and third, the minimum strength—a cause closely but not necessarily connected with the first. How these causes acted will be seen from the mode of indenting adopted discussed in paragraphs 55 and 56 below. The result of the action taken to meet the state of things arising from these conditions, as well as that state of things itself, easily admitted of being foreseen and estimated, and the fatal blindness and neglect of the Government then, renders it more imperative now, that measures of relief should be devised for those who have suffered through no fault of their own.

26. The Statements Nos. I, III, and V have been worked out to the end of the service of the men observed, in order that a standard of comparison in future years might be obtained. In working out these statements the procedure has been as follows:—The condition of the men of each year of service has been observed on the 30th September in twenty-five successive years, the men who died, retired, or withdrew during the period between each observation being specially observed, and placed in their proper year of service; it has been assumed that the number of men who lived and their condition at each year of service was the mean of each pair of observations so recorded.

27. No objection can I think be taken to the mode adopted for ascertaining the number of men who lived at each year of service, but the mode adopted for ascertaining their average allowances and distribution though not the most correct, will I venture to predict be found to lead, for any purpose, to but slight error. As however the observations of the men of all the periods compared have been treated alike, any such slight error in the mode of calculation would seem to affect all the results equally, and would therefore leave their value for the present purpose unaffected. From the mode

which has been adopted however, no rates, as of men on leave, or employed in N.C. appointments can be deduced: when this object was desired the more correct method has been followed, as will be seen from Statements Nos. 8, 9, 10 and 11.

4thly.—The probable course of promotion in the future and its effects on the emoluments of the service.

28. *Statement No. VIII.*—In this statement the calculation of the rate of decrement is shown. This rate is that which underlies all estimate of the future condition of the service and is therefore all-important. In columns 18, 19, and 20 are given three different rates expressed in terms of the number remaining, at each year of service, of 10,000 entering the service. The first column 18 is that worked out by myself, the second column 19 is that given me by Mr. H. E. Stokes and used by him in all his calculations in regard to the Civil Fund, and the third column 20 is worked out with the death-rate deduced for the Civil Fund by Neison, and in use in calculations in regard to it. Assuming the age of entry as twenty on the average, the calculation shows that the rate as given me by Mr. H. E. Stokes is too fast up to the twenty-fifth year of service. This is due not only to the death-rate taken being too high, but also to that of withdrawal or resignation as shown by the rate deduced in column 20. After the twenty-fifth year the rate is slower than that worked out by me; in other words the rate of retirement has been underestimated. It must be remembered that the death-rate which I have deduced, is based on the experience of twenty-four years only, during which term but fifty-two deaths occurred, so that the area of observation is not wide enough to admit of any very reliable conclusion. It is deduced by years of service, it should of course be deduced by years of life, but it shows the same result as already found* by Mr. H. E. Stokes, viz., a great improvement in the rate of late years.

29. He was aware that both the death-rate taken by him was too fast and that of retirement too slow. He wrote to the *Madras Mail* in 1875:—"On the one hand the rates of mortality are in my opinion too high, but on the other the rates of resignation, and retirement, are increasing considerably under the operation of the rules allowing invalid pension and full retiring annuities of £1,000, irrespective of the subscriptions paid up to the Annuity Fund;" except as to resignation my calculations entirely coincide. The explanation will, I think, be found in the fact, that the expectations of the men who entered the service under the nomination system were much greater than they are now. There was more money in the families from which the cadets came, and they could better afford and had greater inducements to resign the service. Now they only go when unable from sickness to hold on any longer; formerly they went from the same reason, and besides, to enjoy the property into which they had come.

30. There is however an influence which tends to make the rates based on the experience of later years somewhat faster, viz., that of the thirty-five years' rule. The rule of which the wording has lately been changed ran during the period under review as follows:—

"After thirty-five years' service counting from date of arrival in India no Civil servant shall be appointed to any new office nor be permitted to retain an office which he has held for a period of five years and upwards except in special cases, which are to

* *Vide his Memorandum on the Civil Fund, dated 6th June 1875.*

be referred for the decision of (the Secretary of State)." This rule was applicable to every Civil Servant appointed, to any office, after its promulgation on the 25th August 1854, and to every Civil Servant to whom it related at the close of five years from that date.

31. In the working of the rule no change has been made since its first introduction. The period on the experience of which the rates given as deduced by Mr. H. E. Stokes are based is, so far as I know, from 1848 to 1872 inclusive, while that which I have taken begins five years later, or in (say) 1853 and is so much the more in accordance with present experience. There are three classes of servants to whom the rule does not apply—

- (1) Members of Council,
- (2) High Court Judges,
- (3) Civil Servants exempted by the Secretary of State.

This accounts mainly for the numbers shown as remaining after thirty-five years' service. In the deduction of rates which I have made of the 355 men observed, in nine cases only was the rule inapplicable owing to exemption, either specially, or on the introduction of the rule.

32. Another influence tending to quicken the rate of retirement in some cases is the reduction of the term of residence from twenty-two to twenty-one years. The reason of this reduction was, that under the rules in force prior to 1868 one year's leave on sick certificate counted as residence. Under the new rules no leave but privilege or subsidiary counts as such. As a compensation or equivalent, in the new rules, the period of residence qualifying for pension has been reduced by one year. If therefore a servant has never had sick leave he can retire a year earlier than he could under similar circumstances under the old rules. On the other hand in considering the results, based on the rates which I have deduced, it must be remembered that never before has there been a block at all approaching in intensity that now existing in the service. There have been periods of over-recruitment, noticeably in the years from 1829 to 1832, but none such as in the years 1862, 1863, and 1864. It may perhaps be thought that men having passed a long time in the lower-paid appointments, will need a longer time in the upper to enable them to save before retirement, while the increased cost of living and the fall in exchange tell heavily on such men, inducing them to remain in the service to the last, and that therefore even the rates which I have deduced are too fast. This may be so, but I do not believe that the position will be very appreciably affected. If impecuniosity compels men to stay, disgust will cause them to go. They will realize that their chance of attaining the highest appointments of the service is very small, and they will retire. Assuming promotion solely by seniority, five appointments to be made within the ten years and all else equal, the odds against the last man of 1864 becoming a member of Council after his twenty-fifth year of service and before his thirty-fifth are 4,683 to 315, while under the same conditions the odds against the last man of 1861 are only 512 to 315. I think it may fairly be asserted that the diminution of their chance of attaining the highest prizes of the service is in itself no small grievance to the men affected by the block.

33. *Statement No. IX.*—In this statement I have deduced the rate at which men get employed in appointments not strictly Civilian, and also the percentage of strength so employed at each year of service, and on the whole period of observation at any one time. Column 14 is the number who lived throughout each year of service reduced to "at" each year of service, and similarly the numbers in column 15 are those on leave throughout each year reduced to "at" each year of service. They have been obtained from the number who "Lived" on service and employed in the

N.C. appointments in the same way as the exposed to risk column No. 11 in Statement No. VIII.

34. *Statement No. X.*—In this statement I have deduced the rate at which men go on furlough, and special leave, and the percentage of strength of the service generally, and of men employed in the regular line so on leave, at any one time. The change in the furlough rules introduced in July 1868 was so fundamental that any conclusions based on the experience of a period prior to that date, would be misleading. I have therefore worked with the experience of eight years only, from 30th September 1868 to 30th September 1876. The result is not unsatisfactory though the period is so short, as owing to the rapidity with which men return from, and go on leave a large number of observations are available. Columns 16 and 17 have been deduced on the same principle as columns 14 and 15 in the statement last discussed. It may be objected that the rates deduced on the experience of the eight years in question are not reliable as the constitution of the service was abnormal during the period. This objection is well-founded, but the disturbance arising from the fact on which the objection is based has been much lessened owing to the limit (*viz.*, 20 per cent. of strength) on the number of men who may be on leave at any one time, and to the rules for dealing with applications for furlough when that limit has been reached. *Vide* Sections 12 and 39 of the Civil Leave Code.

35. *Statement No. XI.*—In this statement I have deduced the rates at which men go on privilege and examination leave and the percentage of strength so absent at any one time. The large percentage absent in the first two quinquenniums of service is due to the inclusion of the men on examination leave.

36. The percentage of strength absent on furlough, special leave, privilege and examination leave at one time is needed for the calculation of the strength of the service and for the determination of the future course of acting promotion. The rates deduced are not necessary to the present purpose, but as their deduction was but small trouble, and as they may be required for calculation hereafter I have given them.

37. From column 16 of the Statement No. VII it will be seen that the average annual number of Civilian appointments of and above the grade of Head Assistant filled substantively struck for the twenty-five years is 97·8. There are at present nineteen districts in which Assistants are employed. The number of men employed in non-civilian appointments is 7·92 per cent. of strength, of men on furlough and special leave 19·80 and on privilege and examination leave 5·25 per cent. The average strength of the service therefore would be given by the equation $97·8 + 19 + \frac{(7·92 + 19·80 + 5·25)}{100}$ strength = strength, or strength = 174·25, with a recruitment in a regularly-recruited service of 7·191 per annum taking the rates of decrement deduced by myself. On the 30th September 1878 however, but eighty-seven similar appointments were substantively filled. Taking this number the strength on that date ought to have been 158·13 with a recruitment in regularly-recruited service of 6·526, on the same rates. The actual strength was on the last-mentioned date including one Bombay Civilian, and the men who were appointed but had not arrived, 161. The strength was therefore more than it ought to have been.

38. In the above estimates of strength it may be remarked that no account has been taken of men

- (1) out of employ,
- (2) on special duty.

Men, nowadays, are out of employ either (1) as a punishment or (2) because they have been absent on leave more than two years or when furlough was not due

to them. Between 30th September 1868 and 1876 there have been but five so far as I can ascertain put out of employ for the first reason mentioned out of 1,333 (*vide* column 15, Statement No. IX) exposed to risk of all kinds other than death, withdrawal or retirement or 0·4 per cent., a percentage so small that it may be neglected and the more so as the period during which the punishment continued, was of short duration. As to the second cause, since the men are on leave, the rate taken on that account includes this item of strength. Those absent on *special duty* have been included in the rate taken for those absent on N.C. appointments.

39. *Statement No. XII.*—In this statement I have calculated the future probable place on the list of the last man of each year of appointment. The calculation is based on the condition of the service on the 30th September 1878. The position of the last man has been taken merely as the most convenient for calculation, and as a representative one from which a fair impression of the position of all the men of the year can be obtained. In judging of his position it is obvious that the most important factor is the standard of comparison adopted. As the evil complained of is irregular recruitment, the standard which I have adopted is that of a regularly-recruited service. Theoretically the course of promotion throughout any period in such a service should be identical with that shown by the averages obtained from observation of the actual course of promotion in the service, whatever it may have been, from the experience of which the rates used in the calculation of that course have been deduced; but to ensure such a result the period over which the observation extended would have to be long enough to absolutely eliminate all casual fluctuations: in short a regularly recruited service gives perfectly the average promotion in the past if the rates used be correct. In such a service the position of any man on the list at any period of service will depend on the strength of the service and the rate of decrement adopted; in the present instance that of the Madras service in both particulars. I have used in this statement the strengths as given above in paragraph 37 and the rate of decrement deduced by myself. Of the strengths given it seems the course least likely to lead to error, to adopt that founded on the average, *viz.*, 174·25. It will be seen by comparing Statements Nos. V and XV that the course of promotion deduced on this basis, corresponds throughout closely with that found to exist in the past where the average has not been affected by casual fluctuations due to abnormal over or under-recruitment, and forms therefore the correct standard of what men have a right to expect. To take this standard will be to provide against the contingency of an increased number of appointments in future years, though any material increase in the number of first-class appointments, *i.e.*, those of more than 2,000 Rupees a-month is not likely to occur, the tendency since the Government passed under the Crown being to restrict the employment of the Covenanted Service (*vide* column 17, Statement No. VII). The standard so obtained is lower than that founded on the lesser strength, and any grievance existing is not likely to be overstated. Further any standard not based on the average is open to the objection (a very strong one) that it is based on an observation of a matter admittedly in a condition of change at a single moment of time. On the other hand that calculated on the present strength 158·13 gives perhaps a better rate of promotion, *e.g.*, a Passed Assistantship in the third year, Acting Head Assistantship in the fourth, confirmed in the tenth, Acting Sub Collectorate in the seventh, confirmed in the thirteenth, Acting Collectorate in the fourteenth or fifteenth, confirmed in the nineteenth, and a seat in the Board in the twenty-eighth. The periods of attaining these several offices are much later particularly in the earlier years (an objectionable feature) on the assumption of strength 174·25. Though I have adopted the standard founded on the latter strength, and shall argue on it throughout, I have thought it well to give that founded on the former also, so that some idea may be formed of the importance of maintaining a due proportion between the

40. *Statement No. XIII.*—This is a statement in all respects similar to that last discussed, except that it is calculated with Mr. H. E. Stokes' rates instead of those deduced by myself. I have worked it out, as, owing to Mr. H. E. Stokes' great experience in calculations like the present, a calculation founded on the rates deduced by him must be allowed great weight. Given the rates, the calculation of a statement like that under discussion is mere arithmetic; the use of the rates referred to enormously augments the future calculated grievance of the service. It will be seen from Statements Nos. V and XVI that the standard with strength 174.25, calculated with these rates, agrees closely up to the twelfth year of service with the general average struck (Statement No. V), but after that date rapidly outstrips it, a feature to be expected as the rates have otherwise been found too fast. It must be remembered, in regard to all the averages given at the earlier years, that in regard to those years alone has an increase in the rates of pay been introduced (*vide* paragraph 11 *supra*); so that though the average is correct what will now be received is greater.

41. *Statement No. XIV.*—In this statement I have worked out the average value of each place on the list. The statement is founded on twenty-five observations on the 30th September of each year from 1852 to 1876. It does not include leave allowances, i.e., when the place was held by a man on leave, his emoluments have been omitted from the total, and he himself from the number of men on which the average is struck. I found it necessary to lump together every five places, to assign the average so obtained to the middle place, and interpolate means for the other places. The emoluments slightly decrease between the forty-third and forty-first, and the twenty-eighth and twenty-third places. This is due to the fact that the average acting allowance was falling more rapidly than the pay was rising. In the higher places where this has occurred, mere seniority is allowed less weight than in regard to the lower appointments, in the selection both for acting and permanent appointments, and as the acting appointment does not necessarily go up the list the average has been affected. It is due also to the fewness of the observations of acting allowances in the higher grades. Men act very little after they attain their Collectorates.

42. *Statement No. XV.*—By the aid of the statement last discussed, I have in this, assigned its value to the future place on the list of the last man of each year of appointment as calculated in Statement No. XII. I have rejected decimals under the ordinary rule. The figures in this statement are averages; those in No. V actuals. From the actuals we learned that the 1865 men were the most unfortunate in the service. This statement shows that the pressure will continue on them and on the last man of 1864. Again we see, that of the juniors the luckiest men are the 1874 men. The effect of the block is felt by all the men between the last man of 1863 and the last man of 1878, and will continue to be felt by the last man of each year from 1864 to 1868 throughout his service of thirty-five years, and by the last man of 1878 up to his thirteenth year; by the men of the years intermediate between 1868 and 1878 up to a period of service gradually falling from the thirty-fifth year to the thirteenth. The exact year may be seen from the statement by observing when the allowances of the last man coincide most closely with the standard given in column 2 of the statement. After the effect of the block ceases to be felt (take for example the 1874 men) the probable emoluments of the last man begin to exceed very considerably the standard till in his twenty-seventh year he draws more than 400 Rupees a-month above it. This is due to the fact that the men of the block will be retiring, either voluntarily, or compulsorily, at a very quick rate, and that in consequence he will find nothing but vacancies in front, and will obtain promotion analogous to that of the men of 1862 and the few years previous. He owes the advantage of his position to

the under-recruitment since 1864 (*vide* paragraph 21 *supra*). The men of the years between 1878 and 1868 benefit from the disappearance of the block; those appointed prior to 1874 at a later year of service, and in a lesser degree, the nearer they are to 1868; those appointed after 1874 from a slightly later period of service in a very slightly greater degree. The last man of 1878 is weighted with the normal recruitment in the years from 1875 to 1878. I have stated above, paragraph 15, that the promotion of the last man of 1862 if retarded has not been so appreciably; this statement shows that his future position will be considerably better than the standard. They owe their promotion to the disappearance of the block appointments from 1829 to 1832.

43. *Statement No. XVI.*—In this statement is worked out the value of the place on the list calculated in Statement No. XIII. A comparison of it with that last discussed will shew how the use of Mr. H. E. Stokes' rates affects the calculated future position.

44. We are now in a position to estimate the probable loss of the last man of the years 1864 and 1865 during their entire service. In the subjoined statement their future loss is worked out. It amounts for the last man of 1864 to Rupees 1,24,132-4-0 and of 1865 to Rupees 1,10,212-8-0:—

STATEMENT showing the future probable loss during their Service of the men appointed in the Years

[illegible]

45. We may assume that the loss of the last man of 1864 was the same as that of the first half of 1865. It was therefore (*vide* Statement No. VI) up to the twelfth year of service, *i.e.*, up to 1876, Rupees 17,063. Since the position of the first man of 1865 is better than that of the last if the average of the year be taken the loss of the last man is under-estimated. Taking the average of the year, the loss of the last man of 1865 was up to his eleventh year of service, *i.e.*, 1876, Rupees 10,666·8. The annual loss per head of the men of the first half of 1865 was between their eleventh and twelfth year—6,396·2; the loss of the last man of 1864 is between his fourteenth and fifteenth year—3,907·2; inserting two means his loss between the twelfth and thirteenth and the thirteenth and fourteenth year is Rupees 10,031·8. The average loss per head of the 1865 men between their tenth and eleventh year was Rupees 3,456·8; their loss between the thirteenth and fourteenth year is Rupees 2,869·2. Their loss between the eleventh and twelfth and the twelfth and thirteenth years of service is therefore inserting two means Rupees 6,301·6. The loss is therefore

	Actual Loss.	From 1876 to 1878.	Future Loss.	Total.
	RS.	RS.	RS.	RS.
Last man of 1864	17,063·0	10,031·8	1,24,137·4	1,51,231·2
Do. of 1865	10,666·8	6,301·6	1,10,212·8	1,27,181·2

Into both the above calculations the loss of the 1865 men enters, as deduced in Statement No. VI, but in that calculation the 1865 men have been lumped with the men of the years succeeding them up to the eleventh year of service. They however entered the service under the College system, and therefore did not participate in the increase of pay commented on in paragraph 11 *supra*. The loss which they like the 1863 and 1864 men sustained in the earlier years is swallowed up in the average which shows a gain. It is clear therefore that for this reason the above calculation in both cases understates the loss.

46. This calculation shows that great as the loss of the suffering members of the service has been in the past, a still more serious loss awaits them in the future; on the other hand it will fall on them when in receipt of higher emoluments, and will be so much the more easily borne.

47. In calculating the statement of loss given above, paragraph 44, the actual pay of the last man of each year might have been taken, but as the statement is one founded on averages, I thought it better to apply one rule to the present and the future. The difference is but small. The two last men of 1863 hold abnormal appointments. The last true representative man of that year is a permanent Head Assistant soon expecting to act as Collector. His emoluments in that position will be—

Head Assistant's pay	RS. A. P.
Deputation as Acting Collector	733 5 4
	1,066 10 8
Total	1,800 0 0

The pay assigned to him in Statement No. XV is 1,659·0 Rupees. His gain is therefore on obtaining an Acting Collectorate pay 150 Rupees a-month. The statement shows that he is losing slightly. He has not yet obtained his acting appointment, and until he does so is losing at the rate of over 600 Rupees a-month; allowing for contingencies and striking a balance the result brought out in the statement is probably very near the mark. It is to be remembered that an average from the nature of the case ought not to agree exactly with an actual.

48. Prior to the introduction of the increased acting allowances in 1868 the allowances of a man of like service with that of the last man of 1863 acting as a Collector would have been—

As Sub Collector	RS. A. P.
As Acting Collector's deputation	1,166 10 8
	433 5 4
Total	1,600 0 0

Statement No. XV therefore tells us, that the last representative man of 1863, is about to attain his Acting Collectorate, since the increased scale of acting allowances has been in force so short a time that the average has not yet been materially raised, though it appears that it has been so slightly. From the remarks in the last paragraph however may be gathered the explanation of the fact that in fact up to date the 1863 men have lost so considerably while as calculated the last man seems now to lose inappreciably. It is that while averages proceed regularly, actual promotion does so *per saltum*; the last man of 1863 is just about to leap—further he is about to leap by the aid of an enormous increase in acting allowances.

49. Statement No. XVII.—In this statement I have worked out the place on the list, to which the permanent and acting appointments of the Rupees 3,000, 2,333 and 1,167 and 733 grades, will descend. Taking the number of men in each year of service on 30th September 1878, the number remaining in each future year has been ascertained by applying the rates deduced in column 18 of Statement No. VIII. Of these the percentage absent (1) in N.C. appointments and (2) in N.C. appointments, on furlough and special leave, privilege and examination leave has been ascertained biennially, the first with the rates given in column 16 of Statement IX, the second with the rate given in columns 16, 17, and 17 of Statements Nos. IX, X, and XI. The number so absent has then been deducted from the number remaining in the service and the remainder totalled. When the total reached the number of appointments in any grade, in the one case the average number, in the other the number existing on the 30th September 1878, the number of men absent to that point for the two causes above mentioned was ascertained, and added to the number of appointments, which gave the place on the list to which the appointment or acting appointment of the grade in question would descend.

50. It was necessary to proceed in this way in regard to the acting appointments, but the place to which the permanent appointments would, on the average, descend might be ascertained from Statement No. VII. It is given below:—

51. From the statement under discussion and No. XII we can ascertain the year of service in which the last man of each year of appointment will obtain an appointment of each of the grades specified. The result is given in the subjoined statement showing the year of service in which the last man of each year of appointment will obtain a permanent or acting appointment of the grade specified, on the assumption of the average number of appointments filled substantively in each year from 1852 to 1876 and on the 30th September 1878.

Year of Appointment.	Calculated on the average Number of Appointments filled substantively in each year from 1852 to 1876.								Calculated on the Number of Appointments existing on 30th September 1878.							
	Permanent.				Acting.				Permanent.				Acting.			
	3,000 Rs.	2,333 Rs.	1,167 Rs.	733 Rs.	3,000 Rs.	2,333 Rs.	1,167 Rs.	733 Rs.	3,000 Rs.	2,333 Rs.	1,167 Rs.	733 Rs.	3,000 Rs.	2,333 Rs.	1,167 Rs.	733 Rs.
1878 ..	28.9	17.9	13.6	10.4	26.0	12.7	6.6	1.0	28.9	18.5	15.3	12.4	26.0	13.5	9.7	4.1
1877 ..	28.6	18.1	13.9	10.2	25.8	13.0	6.2	..	28.6	18.7	15.5	12.4	25.8	13.8	9.5	3.8
1876 ..	28.1	18.1	14.0	10.0	25.4	13.1	5.6	..	28.1	18.8	15.7	12.4	25.4	13.6	9.1	3.0
1875 ..	27.8	18.4	14.1	9.9	25.3	13.2	5.3	..	27.8	19.0	16.1	12.3	25.3	14.1	9.1	..
1874 ..	27.4	18.5	13.9	9.5	25.1	13.1	8.9	..	27.4	19.1	16.2	11.9	25.1	14.2	8.6	..
1873 ..	27.9	19.1	14.4	10.0	25.7	13.9	..	..	27.9	19.7	16.8	12.4	25.7	14.9	9.0	..
1872 ..	28.2	19.7	14.6	10.1	26.1	14.2	..	..	28.2	20.2	17.3	12.7	26.1	15.1	9.1	..
1871 ..	28.9	20.5	15.2	10.6	26.9	15.1	..	..	28.9	21.0	18.1	13.3	26.9	16.0	9.5	..
1870 ..	29.4	21.2	15.7	11.0	27.5	15.9	..	..	29.4	21.7	18.5	13.7	27.5	16.6	9.7	..
1869 ..	30.2	22.1	16.3	11.5	28.3	16.5	..	..	30.2	22.5	19.2	14.3	28.3	17.2	10.0	..
1868 ..	30.8	22.5	16.4	11.3	28.6	16.7	..	..	30.8	23.0	19.1	14.2	28.5	17.7	..	..
1867 ..	31.1	22.7	16.2	10.9	28.2	16.6	..	..	31.1	23.2	19.0	13.9	28.2	17.6	..	..
1866 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1865 ..	32.4	23.8	16.9	..	30.1	17.1	..	..	32.4	24.4	19.9	14.4	30.2	18.6	..	..
1864 ..	33.2	24.2	17.9	..	30.8	17.3	..	..	33.2	25.0	20.3	14.6	30.9	18.7	..	..
1863 ..	32.5	21.3	..	..	29.8	..	..	..	32.5	21.1	16.8	..	29.9	..	..	..
1862 ..	29.7	..	..	..	27.2	..	..	..	29.7	16.5	..	..	27.2	..	..	..
1861 ..	27.0	..	..	..	23.8	..	..	..	27.0	..	..	..	23.8	..	..	..

52. After the incongruous state of promotion shown in this statement, a noticeable feature is the enormous difference in the promotion of the men below the grade of Sub Collector according as the average, or existing number of appointments, is used as the basis of calculation. It amounts almost to three years' promotion in the case of the men of the later years of appointment, yet the difference in the number of appointments is only 10.8; the appointments lost were mainly of the 1,500 Rupees grade (*vide* paragraph 23) which shows the reason of the fact noticed above. From this we may also infer the enormous loss which the abolition or transfer of even one appointment entails on the service. It is a mistake to suppose in such a case that the man superseded alone suffers. Every man below him suffers at every step, though of course in a diminishing degree.* Another feature in the statement is that the calculation shows that the existing state of things will be reproduced. As the 1862 men now, we see that the men of 1874 and subsequent years of appointment though delayed in the earlier years obtain promotion in the higher grades more rapidly than the average.† The last man of 1878 will get his Acting

* I would roughly estimate that the abolition of a single Collectorate costs the service not less than 70,000 Rupees.

Collectorate within a year of his permanent Head Assistantship—a narrow escape of the acmé of absurdity in promotion. The fact already pointed out that the 1874 men are the luckiest juniors appears in this statement again plainly indicated. I think it may fairly be asserted that this statement shows that the state of the service is entirely prejudicial to efficient administration, and that the prospects

† They will obtain their Acting Collectorate in a time much below the average, and before they get their Sub-Collectorate permanently.

of promotion of the men appointed between 1864 and 1868 are practically hopeless and of the juniors generally unsatisfactory.

53. In calculating these statements generally I have taken as the basis of calculation the average number of appointments, obtained from twenty-five observations on the 30th September of each year from 1852 to 1876. The average was taken to provide for the contingency of a variation or increase in the number of appointments; but it is necessary to remember that, as the existing number of appointments is 10.8 short of the average, the calculations which I have made will only be accurately fulfilled if 10.8 appointments of the 1,500 Rupees grade, or of higher grades, be at once created; should this not occur, or should only a smaller number be created, the grievance as calculated will be understated in the first case very seriously; in the second in a degree proportionate to the difference between 10.8 and the number created. As it appears very improbable that 10.8 appointments will be created now, or even within the service of any of the present members of the service, it may safely be asserted that the results which I have brought out will understate the grievance of the service in regard to their future probable money prospects.*

54. Having completed the examination of the past and the forecast of the future of the service in regard to money prospects it remains but to make a few observations on the remaining points referred to above in paragraph 5.

55. *The mode of recruitment of the service.*—The system followed up to 1870 in regard to this important matter was as follows: the Accountant-General submitted three statements to Government: in one marked A the number of Civilian appointments existing on the 30th September was made out, and the number of Civilians actually filling non-civilian appointments was stated; the total of the two formed the basis adopted for the requirements of the service. In the second statement marked B, on the left-hand side was placed the requirements of the service, the absentees on furlough calculated on the average of five years, and on sick and other leave, and students; and on the right-hand side the actual number in the service on the 30th September, the number expected that year, and the two subsequent years, and the Civilians from other Presidencies, from the total of which was deducted the retirements at a rate of four a year, the number of annuities formerly available, the deaths calculated on the average number which occurred in the previous five years, and the number of Madras Civilians employed in other Presidencies and in appointments not necessarily held by Civilians. On the numbers so obtained the number indented for was based. The third statement is merely a re-arrangement of No. B. The most objectionable points in this indent are the modes of ascertaining (1) the requirements of the service, (2) the number of absentees on furlough and sick leave, of (3) deaths, and of (4) retirements. The first is wrong because it is calculated on a single observation of a matter in a state of continual change; the second because the number varies with strength; the third for the same reason and because the period on which the average is struck is absurdly short; and the fourth because it was not in accordance with the then existing facts, and because the probable number of retirements depends on the distribution of the men in the service by years of service. The first three though causing an enormous error in the proper recruitment for the year correct themselves in the next, and are not perhaps such important errors as the last. It was under this system of indenting that the present very unsatisfactory state of the service arose. The above statements are still submitted to Government prior to the 30th September in each year.

56. In 1870 however an attempt was made to ascertain more exactly what the percentage rates of decrement by death, withdrawal, and retirement and of absentees

* Note.—The exact number of appointments to be created above any particular grade needed to verify the calculation on the 30th September 1878 was obtained from the statement given in paragraph 53 by ascertaining the number of the average number of appointments existing on the 30th September 1876.

were. The percentages obtained were struck on the totals, without any regard to the distribution by years of service of the men in the service, further than to classify them into seniors and juniors. In short the strength of the service was found as it has been above in paragraph 37. On the data supplied it was decided to indent for the men who arrived in 1873, 1874, 1875, and 1876. This mode of indenting, though a vast improvement on that which went before, is faulty in principle, in that it neglects the distribution by years of service of men in the service, on which the probable retirements entirely depend, and with which the death and withdrawal rates vary. In Statement No. 8 I have given the percentage rates needed for a correct estimate of the decrement above referred to up to any year, until the members composing it entirely pass away, of a service of a given constitution on any particular date. From this, and the strength as correctly ascertained in the manner indicated above, since the number of appointments to be filled is there taken into consideration, the number to be indented for during any required period can be determined. It would seem necessary, both in the interests of Government and of the service, that a more exact method for estimating the requirements of the service should be adopted.

57. An examination of the retirements for the last twenty-five years shows that men begin to retire quickly about their twenty-seventh year of service. When the 1862, 1863 and 1864 men reach their twenty-seventh year of service—in other words in the years 1889, 1890 and 1891—a rush out of the service may be expected, but as the number of men in the years of service above 1862 is very small, the number of retirements in the years immediately preceding 1889 will be very small. By the present mode of indenting however no provision for these facts, either for the abnormal slowness in retirements or the rush, can be made. The result must be injustice to the men brought in from the first cause, and the undue promotion of junior men owing to the second. In short a repetition of the block from which the service is now suffering will occur. The only mode in which such a repetition can be prevented is by spreading the necessary reserve over the recruitment of a number of years preceding. The extra men so recruited will suffer little, while if the required number be thrown in in a lump, both those recruited, and below them, will suffer much.

58. *The remedies granted in like cases.*—I have not sufficient information to discuss in detail the remedies granted in the North-West Provinces. The following are the remedies granted in Bombay. They are—

1st.—A retiring pension proportioned to £1,000 per annum in the ratio which actual residence bears to the required residence of twenty-one years with the option of capitalizing any amount in excess of £500 per annum.

2nd.—The grant of personal allowances as shown in the first two columns of the following statement:—

In Year of Service.	Personal Allowance granted.	Average of past Years in Madras generally.	Average of past Years in Madras appointed before 1862.
6 ..	Rs. 550	Rs. 742-8	Rs. 792-9
7 ..	600	828-8	884-6
8 ..	600	907-0	968-1
9 ..	700	987-1	1,016-8
10 ..	700	1,094-8	1,116-7
11 ..	800	1,222-7	1,299-3
12 ..	900	1,271-9	1,471-1
13 ..	900	1,531-1	1,561-0
14 ..	1,000	1,608-8	1,608-8
15 ..	1,000	1,608-8	1,608-8

The grant is made under the following conditions:—

“In calculating the period which any officer is to reckon as qualifying for the guarantee allowance, it will be necessary to leave out of account any time in excess of three years spent by him before passing his departmental examinations, and also any time in excess of one year spent by him on leave on medical certificate before he was of eight years' service. These are causes which set back an officer's ordinary promotion, and they, therefore, should operate also to set back his guarantee allowance.

“The allowance should also * * * * * be dependent upon the pleasure of the Local Government to this extent, that if any officer refuses any appointment or transfer, without what the Local Government may consider sufficient reason, the allowance should ordinarily be withheld. Similarly the Local Government should withhold the allowance from any officer whom it considers unfit, either from inefficiency or from misconduct, to hold an appointment which would give equal remuneration under the ordinary rules of promotion.”

59. In considering the remedy it is necessary to consider the evil; the latter may I think be stated to be, that the majority of the seniors are too junior, and of the juniors too senior. It lately almost occurred, and could as a fact have occurred as the various officers filled the offices named simultaneously though two only were in the same district that the Acting Collector was appointed in the year 1862, the Acting Sub Collector in 1863, and the Acting Head Assistant Collector in 1864. It is natural that the service should think that the strongest ground for redress is the hardship which the present state of things entails on them, but it would be perhaps well to remember that from a Government point of view the question is merely one of the efficiency of the administrative machine—the hardship in question being of importance only in so far as it causes that machine to work with or without friction. Any remedies granted should, I think, aim at two things (1) to retain in the service a sufficient number of senior men, and (2) to prevent inordinate promotion of junior men. To give proportionate pensions to the men appointed from 1864 to 1868 would seem, though offending against the above principles, to offend so in the least degree, for the enhanced promotion would ensue but in a very slight degree to the men now entering the service, since the advantage resulting to those below any man removed from his removal is a quantity diminishing rateably to their distance from him, or to the time which must intervene before they reach the point of service at which he was removed; the promotion accruing to the intervening men would not more than bring them up to the average, and the step would only accelerate the promotion of the more senior of them to appointments for which they are by their service already completed presumably fitted. The vacuum so caused in the service should for the same reason be met by increased recruitment from below. It would hardly seem necessary to limit the number of such pensions granted, for experience elsewhere has shown that the inducement of proportionate pensions is not so strong as to cause a large number to go.

60. The above remedy would act by getting the men completely out of the service, but their employment in appointments outside the regular line of the service would act in a manner precisely similar; the difficulty is to find such employment and to ensure that Civilians shall be, and shall continue to be appointed to it. The number of Civilians employed out of the regular line is now almost a minimum.

61. The grant of personal allowances on a scale similar to that allowed elsewhere will probably be a dead letter in this Presidency for the scale departs too far from the average (*vide* columns 3 and 4, statement in paragraph 58); to be effectual it should be raised. I have above observed (paragraph 19) that no valid deduction can be made

ing the number of Madras Civil Servants who lived at each Year of Service between the 30th Sept. 1852 and 1876, the number on Leave and on Actual

YEARS OF APPOINTMENT.		Number of Men who lived at each Year of Service.	Number of Men on Leave at each Year of Service.	NUMBER OF MEN ON ACTIVE SERVICE IN				GRADES.																Q
								Out of Employ.			350 and less.			525.			733.			1,167.				
From	To	C.A.	N.E.	N.C.	Total	C.A.	N.E.	N.C.	C.A.	N.E.	N.C.	C.A.	N.E.	N.C.	C.A.	N.E.	N.C.	C.A.	N.E.	N.C.				
1876	1865 ..	25.5	..	25.5	..	..	25.5	..	..	..	25.5	..	..	..	..	..	..	..	..	..	..			
	1864 ..	24.0	..	24.0	..	..	24.0	..	..	..	24.0	..	..	..	..	..	..	..	..	..	..			
	1863 ..	37.5	..	37.5	..	..	37.5	..	..	..	37.5	..	..	..	..	..	..	..	..	..	..			
	1862 ..	37.5	..	37.5	..	..	37.5	..	..	..	37.5	..	..	..	..	..	..	..	..	..	..			
Total..		87.0	..	87.0	..	..	87.0	..	..	..	87.0	..	..	..	..	..	..	..	..	..	..			
1875	1865 ..	48.5	..	47.5	..	..	47.5	..	..	..	47.5	..	..	..	..	..	..	..	..	..	..			
	1864 ..	48.5	..	48.0	..	..	48.0	..	..	..	48.0	..	..	..	..	..	..	..	..	..	..			
	1863 ..	76.5	..	75.5	..	..	75.5	..	..	..	75.5	..	..	..	..	..	..	..	..	..	..			
	1862 ..	76.5	..	75.5	..	..	75.5	..	..	..	75.5	..	..	..	..	..	..	..	..	..	..			
Total..		174.0	..	171.0	..	..	171.0	..	..	..	171.0	..	..	..	..	..	..	..	..	..	..			
1874	1865 ..	41.5	..	40.5	..	..	40.5	..	..	..	31.5	..	..	9.0	..	..	..	..	..	..	..			
	1864 ..	48.5	..	45.5	..	1	45.5	..	..	..	45.5	..	..	..	..	..	..	..	..	..	..			
	1863 ..	84.5	..	76.5	..	1	77.5	..	..	..	76.5	..	..	..	..	..	1	..	..	..	..			
	1862 ..	84.5	..	76.5	..	1	77.5	..	..	..	76.5	..	..	..	..	..	..	..	..	..	..			
Total..		173.0	..	162.5	..	2	164.5	..	..	..	153.0	..	..	9.0	..	1.0	..	..	..	..	..			
1873	1865 ..	36.5	..	35.5	..	..	36.5	..	..	..	18.5	..	..	22.0	..	..	..	..	..	..	..			
	1864 ..	48.5	..	42.5	..	2.5	45.5	..	..	..	41.0	..	..	1.5	..	2.0	..	..	..	..	..			
	1863 ..	88.5	..	72.5	..	..	76.5	..	..	..	76.5	..	..	3.5	..	1.5	..	..	..	..	..			
	1862 ..	88.5	..	72.5	..	..	76.5	..	..	..	76.5	..	..	3.5	..	1.5	..	..	..	..	..			
Total..		172.0	..	150.5	..	5.5	157.5	..	..	..	123.0	..	..	27.0	..	3.5	..	..	..	..	..			
1872	1865 ..	33.5	..	30.0	..	1.0	31.5	..	..	..	4.5	..	..	25.5	..	..	..	..	..	..	..			
	1864 ..	47.5	..	42.0	..	2.5	44.5	..	..	..	30.0	..	..	9.5	..	1.5	..	..	..	..	..			
	1863 ..	91.5	..	71.0	..	1	76.5	..	..	..	49.5	..	..	6.5	..	2.0	..	..	..	..	..			
	1862 ..	91.5	..	71.0	..	1	76.5	..	..	..	49.5	..	..	6.5	..	2.0	..	..	..	..	..			
Total..		172.0	..	143.0	..	1	152.0	..	..	..	84.0	..	..	41.5	..	3.5	..	..	..	..	..			
1871	1865 ..	29.5	..	25.0	..	1.0	26.0	..	..	..	5.5	..	..	24.0	..	..	..	..	..	..	..			
	1864 ..	47.0	..	41.0	..	1.5	42.5	..	..	..	14.0	..	..	22.5	..	..	..	..	..	..	..			
	1863 ..	95.5	..	72.5	..	1	76.5	..	..	..	31.5	..	..	4.0	..	..	..	..	..	..	..			
	1862 ..	95.5	..	72.5	..	1	76.5	..	..	..	31.5	..	..	4.0	..	..	..	..	..	..	..			
Total..		171.5	..	138.5	..	1.5	145.0	..	..	..	46.0	..	..	50.5	..	1.0	..	..	..	..	..			
1870	1865 ..	26.5	..	23.5	..	1.0	24.0	..	..	..	5.5	..	..	22.5	..	..	..	..	..	..	..			
	1864 ..	46.5	..	40.5	..	1.5	42.0	..	..	..	3.5	..	..	31.0	..	..	..	..	..	..	..			
	1863 ..	97.0	..	74.0	..	1	78.0	..	..	..	19.0	..	..	5.0	..	..	..	..	..	..	..			
	1862 ..	97.0	..	74.0	..	1	78.0	..	..	..	19.0	..	..	5.0	..	..	..	..	..	..	..			
Total..		70.0	..	137.5	..	1	144.0	..	..	..	23.5	..	..	58.5	..	..	..	..	..	..	..			
1869	1865 ..	24.5	..	21.5	..	1.0	22.5	..	..	..	..	..	..	21.5	..	..	..	..	..	..	..			
	1864 ..	46.5	..	38.5	..	..	41.5	..	..	..	..	..	..	30.5	..	..	..	..	..	..	..			
	1863 ..	101.0	..	77.0	..	1.5	84.5	..	..	..	9.5	..	..	10.0	..	..	..	..	..	..	..			
	1862 ..	101.0	..	77.0	..	1.5	84.5	..	..	..	9.5	..	..	10.0	..	..	..	..	..	..	..			
Total..		171.0	..	137.0	..	1.5	148.5	..	..	..	9.5	..	..	62.0	..	..	..	..	..	..	..			
1868	1865 ..	20.5	..	17.5	..	1.0	18.0	..	..	..	..	..	..	16.5	..	..	..	..	..	..	..			
	1864 ..	46.5	..	34.5	..	..	38.0	..	..	..	..	..	..	26.0	..	..	..	..	..	..	..			
	1863 ..	107.5	..	76.0	..	3.5	89.0	..	..	..	3.5	..	..	9.0	..	..	..	..	..	..	..			
	1862 ..	107.5	..	76.0	..	3.5	89.0	..	..	..	3.5	..	..	9.0	..	..	..	..	..	..	..			
Total..		173.0	..	127.5	..	3.5	140.0	..	..	..	3.5	..	..	51.5	..	..	..	..	..	..	..			
1867	1865 ..	14.5	..	9.5	..	..	9.5	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
	1864 ..	46.5	..	32.0	..	..	35.0	..	..	..	..	..	..	21.0	..	..	..	..	..	..	..			
	1863 ..	111.5	..	75.5	..	..	85.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
	1862 ..	111.5	..	75.5	..	..	85.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
Total..		171.5	..	113.5	..	..	124.5	..	..	..	1.5	..	..	33.5	..	..	..	..	..	..	..			
1866	1865 ..	8.5	..	3.5	..	..	4.5	..	..	..	..	..	..	4.0	..	..	..	..	..	..	..			
	1864 ..	46.5	..	34.5	..	..	38.0	..	..	..	..	..	..	14.5	..	..	..	..	..	..	..			
	1863 ..	112.5	..	83.0	..	..	106.5	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
	1862 ..	112.5	..	83.0	..	..	106.5	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
Total..		166.5	..	95.5	..	..	119.0	..	..	..	..	..	..	19.0	..	..	..	..	..	..	..			
1865	1865 ..	5.5	..	2.5	..	..	3.0	..	..	..	..	..	..	3.5	..	..	..	..	..	..	..			
	1864 ..	46.0	..	26.0	..	..	31.5	..	..	..	..	..	..	10.5	..	..	..	..	..	..	..			
	1863 ..	111.5	..	54.0	..	..	77.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
	1862 ..	111.5	..	54.0	..	..	77.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
Total..		162.5	..	82.5	..	..	111.5	..	..	..	..	..	..	13.5	..	..	..	..	..	..	..			
1st half of 1865 ..	1864 ..	2.5	..	1.0	..	..	1.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
	1863 ..	45.5	..	27.0	..	..	33.5	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
	1862 ..	112.5	..	43.5	..	17.5	7.5	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
	1861 ..	112.5	..	43.5	..	17.5	7.5	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
Total..		160.5	..	71.5	..	13.0	103.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
1st half of 1864	1																							

STATEMENT showing the Percentage of the Members of the Madras Civil Service on active Service, employed at each Year of Service between 30th September 1852 and 1876, in each kind and grade of Appointment by periods of appointment up to the 14th year of Service.

Year of Service.	Year of Appointment.		PERCENTAGE OF MEN ON ACTIVE SERVICE AT EACH YEAR OF SERVICE IN EACH KIND OF APPOINTMENT.				APPOINTMENTS EXCLUSIVELY CIVILIAN BY GRADES.								APPOINTMENTS EXCLUSIVELY CIVILIAN NOT NOW EXISTING BY GRADES.				APPOINTMENTS NOT EXCLUSIVELY CIVILIAN, BUT WHICH TEST IN COMMON WITH OTHERS MAY HOLD BY GRADES.									
	From	To	Civilian Appoint-ments.	Non-Existent.	Non-Civilian.	Total.	Out of Em-ploy.	350.	575.	733.	1,167.	1,500.	2,333.	3,167.	4,000.	5,000.	733.	1,167.	1,500.	2,333.	575.	733.	1,167.	1,500.	2,333.	3,167.	4,000.	5,000.
0	1876	1865 ..	100-0	..	..	100-0	..	100-0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	100-0	..	..	100-0	..	100-0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1863	1852 ..	100-0	..	..	100-0	..	100-0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		100-0	..	..	100-0	..	100-0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1	1876	1865 ..	100-0	..	..	100-0	..	100-0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	100-0	..	..	100-0	..	100-0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1851 ..	100-0	..	..	100-0	..	100-0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		100-0	..	..	100-0	..	100-0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	1874	1865 ..	100-0	..	..	100-0	..	77-8	22-2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	97-8	..	2-2	100-0	..	97-8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1850 ..	98-7	..	1-3	100-0	..	98-1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		98-8	..	1-2	100-0	..	98-6	6-6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	1873	1865 ..	98-6	..	1-4	100-0	..	87-6	61-1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	94-5	..	5-5	100-0	..	91-2	3-3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1849 ..	94-8	..	5-2	100-0	..	88-3	4-6	1-9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		95-6	..	4-1	100-0	..	77-6	17-2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	1873	1865 ..	96-8	..	3-2	100-0	..	14-5	82-3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	94-5	..	5-5	100-0	..	67-4	21-6	5-6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1848 ..	93-6	..	6-4	100-0	..	64-8	8-6	18-3	1-9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		94-5	..	4-9	100-0	..	55-4	27-3	10-9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	1871	1865 ..	96-2	..	3-8	100-0	..	1-9	92-4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	96-4	..	3-6	100-0	..	32-9	52-5	10-6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1847 ..	95-5	..	4-5	100-0	..	41-3	5-8	43-9	5-2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		95-9	..	4-1	100-0	..	31-8	24-9	26-2	2-7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	1873	1865 ..	95-9	..	4-1	100-0	..	3-1	92-7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	94-4	..	5-6	100-0	..	8-2	73-6	11-9	1-3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1846 ..	94-9	..	5-1	100-0	..	24-4	6-4	56-4	7-7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		95-4	..	4-9	100-0	..	15-7	20-5	24-0	4-5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

9	1867	1865 ..	92.7	..	7.3	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	82.7	..	17.3	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1859 ..	81.6	..	18.4	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		85.1	..	14.1	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	1866	1865 ..	88.9	..	11.1	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	89.1	..	10.9	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1861 ..	76.4	..	23.6	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		80.3	..	19.7	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	1865	1865 ..	83.4	..	16.6	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	82.5	..	17.5	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1861 ..	70.2	..	29.8	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		74.1	..	25.9	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	1st half of 1864	1865 ..	100.0	..	..	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	80.6	..	19.4	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1861 ..	63.4	..	36.6	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		68.3	..	31.7	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	1st half of 1864	1863 ..	85.6	..	14.4	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	62.7	..	37.3	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1861 ..	69.2	..	30.8	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		69.2	..	30.8	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	1st half of 1864	1863 ..	85.6	..	14.4	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1864	1863 ..	72.5	..	27.5	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1862	1861 ..	72.5	..	27.5	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total..		72.9	..	27.1	100.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..



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