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[Despatch Abstract.

STATE HOSPITALS.

Reviewing the annual report and statistics for 1894 of the---in the town of Madras.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

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GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—the following paper :—

Letter from the Surgeon-General, dated 18th June 1895, No. 363.

ABSTRACT.—Forwarding the annual report and statistics for 1894 of the State hospitals in the Presidency Town of Madras.

ORDER—dated 28th August 1895, No. 712, Public.

The Surgeon-General, in submitting his report on State hospitals for 1894, explains that, in order to show more clearly the work done in, and the relative cost of, each hospital, he has adopted a somewhat different system from that of preceding years.

2. A comparative statement of the work done and the charges incurred during the past three years in the six State hospitals is appended :—

Year.	Number of patients treated.		Total.	Average daily attendance.		Percentage of mortality.	Major surgical operations.	Recoveries from paying patients.	Cost of diets.	Total gross expenditure.
	In.	Out.		In.	Out.					
								Rs.	Rs.	Rs.
1892	13,185	76,087	89,272	851·71	576·40	6·19	3,498	15,987	1,02,005	3,49,769
1893	13,194	81,518	94,712	810·26	563·47	5·18	3,417	15,661	1,09,951	3,64,966
1894	13,863	82,515	96,378	821·38	560·68	5·02	3,355	21,481	1,06,071	3,53,050

3. Compared with the preceding year there was an increase of 1,666 patients and a decrease in the percentage of mortality. The expenditure was less by Rs. 11,916 and the cost of diets fell from Rs. 1,09,951 to Rs. 1,06,071, or by 3½ per cent. This is accounted for by the fall in the price of provisions. The price of rice, which is the principal article of diet, fell, however, from 18·8 seers per rupee in 1892–93 to 21·3 seers in 1893–94, or by more than 13 per cent.

4. It appears that the expenditure on bazaar medicines was only Rs. 483 against Rs. 5,117 in 1893. This is attributed mainly to the more correct entry of charges under their proper heads. In its letter, No. 592, dated 27th September 1894 (G.O., No. 341, dated 4th May 1895), the Government of India remarked on the large expenditure in special State hospitals in Madras in 1893 on bazaar drugs as well as on English medicines, and in his letter recorded in G.O., No. 527, dated 25th June 1895, the Surgeon-General explained that the cost of medicines in this Presidency

was much higher than in the North-West Provinces on account of the less extensive use of indigenous drugs in Madras where the attention of medical subordinates is more largely directed in their professional training to the British Pharmacopœia, and where there is also a prejudice against the use of these drugs on account of the difficulty of getting them pure and reliable. In paragraph 4 of the Government Order last quoted, the Government remarked that more attention should be paid, in the education afforded at the Medical College, to the employment of indigenous drugs, which are naturally much cheaper than European medicines, and directed that their use where practicable and expedient should be encouraged. It is clear from the figures now furnished that the matter is one which calls for the particular attention of the Surgeon-General.

5. In addition to the patients treated in the six State hospitals, it appears from paragraph 5 of the report that the large number of 103,362 received attention in the other private, municipal, or aided institutions which exist at the Presidency Town. These large numbers evidence the growing popularity of European hospitals and dispensaries. Although 1894 was a comparatively healthy year, there was a marked increase in the number of cases of malarial fever. The statement of mortality in paragraph 9 contains, as remarked by the Surgeon-General, inadequate information and no percentages. It is hoped that the orders already issued by the Surgeon-General will result in more detailed records being maintained in future. The existence of septicæmia in the various hospitals should in future reports be fully discussed, and it should be noticed what proportion of the cases is traceable to conditions arising before the admission of the patient and how far they originate within the hospital. The return of 418 cases in the Women and Children's Hospital under the general, undefined head of "Debility" is unsatisfactory, but as the officer responsible has retired from the service the Government will merely request the Surgeon-General to take steps to prevent such remissness in future.

Cases in the General Hospital ..	6,647
„ the Women and Children's Hospital	586
„ the Lying-in Hospital ..	760
Total ..	7,993
Cases in 1893	5,623
„ 1892	3,432

6. From the statement in paragraph 4 it appears that altogether 1,035 beds were available but the average daily sick numbered only 821. This is particularly noticeable in the case of the Lying-in Hospital where the 122 beds had on an average only 68 occupants. The Surgeon-General should in future report the largest number of in-patients on any one day at each hospital.

7. Details regarding operations, such as were embodied in paragraph 6 of the report for 1893 have not been afforded. The omission should be supplied and the particulars given in future. Statement III-A contains particulars of major operations, but they have not been summarised, nor is anything said in regard to minor operations.

8. The average cost of diets in the different institutions during the past three years is shown in the margin. The decrease at the Leper Hospital is stated to be due to the more strict maintenance of the diet registers. This statement is, however, discounted by the second paragraph of the report at page 94, from which it appears that, had last year's method of calculation been adopted, the average cost would have been As. 5–7. The Surgeon-General states that the variations in the cases of other hospitals are not

	1892. A. P.	1893. A. P.	1894. A. P.
General Hospital	5 11¼	6 5⅔	6 3
Women and Children's Hospital	5 11	6 5	6 8
Lying-in Hospital { European	8 4	8 9	9 7
Lying-in Hospital { Native	3 8	3 9	3 10
Ophthalmic Hospital	3 0½	3 4	5 4
Leper Hospital	4 3	5 8	3 11
Voluntary Venereal Hospital	3 11⅓	3 11⅓	3 11

sufficiently marked to call for special notice. This apparently refers to the *total* cost of the diets, which for the past two years was as shown in the margin. The averages, however, exhibit considerable increases at the Ophthalmic and Lying-in Hospitals and a rise of three pies per diet at the Women and Children's Hospital. The Government cannot find that any attempt has been made to explain satisfactorily these increases in view of the fact that the prices of food commodities were lower in 1894 than in 1893. If the figures given are correct, the cost of diets at the Ophthalmic Hospital rose more than 60 *per cent.* As to the Lying-in Hospital, the Surgeon-General states that its special requirements sufficiently explain the increase. This is incorrect; they account for a difference but not for a rise in the face of the fall in the price of articles of diet. The decrease in the General Hospital average is good so far as it goes; but in this and every other case except that of the Leper Hospital (the returns for which in previous years there are, as already stated, reasons for distrusting), there has been either an increase since 1892 or an insignificant decrease, although it is certain that from 1892 to 1894 there was a considerable fall in prices. The Government has in these circumstances reasons for dissatisfaction with the manner in which the hospitals have been managed in this respect; and His Excellency in Council trusts that the matter will receive the early and close attention of Surgeon-General Sibthorpe.

	1893. Rs.	1894. Rs.
General Hospital	37,507	39,480
Women & Children's Hospital.	19,461	19,839
Lying-in Hospital	16,596	16 472
Ophthalmic Hospital.. ..	5,369	5,264
Leper Hospital	23,996	18,751
Voluntary Venereal Hospital.	7,023	6,265

9. The averages given in column 6 of the statement at page 21 do not correspond in all cases with the figures given in the separate reports attached, *e.g.*, column 6 at page 32 gives the average cost for each diet in the General Hospital as As. 6–1¾ as against As. 6–3 in the Surgeon-General's statement; and at page 50 the averages for the Lying-in Hospital are shown to be—

	Rs.	A.	P.
European	0	9	7
Native	0	3	10
2)	0	13	5
	0	6	8½

as against the Surgeon-General's As. 6–7. There is also reason to suppose that the systems adopted in the various institutions for the calculation of the averages are not all on the same lines. It is therefore quite impossible to arrive at figures on which correct comparisons can be based. The Government directs that, in future, the cost of European and Native diets be kept quite distinct, and separate averages *per diet per diem* under *each* be worked out. This is the method employed in the report on the Calcutta Medical Institutions (*vide* column 6 of the statement at page 36 of the report for 1892), and is the only method that affords any useful information or shows where financial improvement may be effected. The Surgeon-General will state what method is at present in force in each of the State hospitals for the calculation of the average cost of each diet.

10. In regard to the financial side of the report, it is satisfactory to note that the amount paid by Government fell from Rs. 3,44,679 to Rs. 3,30,744, although the number of sick treated was larger. The recoveries from paying patients rose from Rs. 19,661 to Rs. 21,481, which is satisfactory. In this connection the Government would observe that the G.O., of 13th October 1894, No. 770, Public, quoted in paragraph 6 of the General Hospital report (p. 27), dealt solely with the method of recovery from *public servants* treated in the Presidency hospitals. The Surgeon-General should procure information from Calcutta and Bombay as to the charges made to private patients treated in the State hospitals in those cities, and the mode in which

recoveries are made. It appears to Government that it should generally not be difficult to distinguish labourers and artisans, who should not pay, from the superior classes, who should pay. The Government desires also to be furnished with particulars of the use made of the quarters provided for native gentlemen and the amount of fees recovered on that account. The large increase from Rs. 48,583 to Rs. 59,443 on salaries of Medical Officers is satisfactorily explained; as also is the advance from Rs. 28,623 to Rs. 33,646 in the cost of "inferior dispensary establishment" at the General Hospital. The Surgeon-General's attention will be invited to paragraph 5 (*c*) and (*g*) of Brigade-Surgeon-Lieutenant-Colonel Price's report (page 26) and he will be requested to state under what authority temporary hands are sanctioned month by month. The system, if worked carefully, may be a source of economy but is opposed to account principles as to the appointment of establishments. The Surgeon-General has already been directed to include all establishment which is practically permanent in the proposition statement for the revision of the establishment of the General Hospital.

11. The Government has recently, by G.O., dated 4th May 1895, No. 341, Public, directed the Surgeon-General to make a full and careful inquiry into the cost of medicines as well as into the whole question of the expenditure incurred in the City State hospitals; and this report is awaited.

12. The Government regrets to observe that the present report shows that in more than one way there has been mismanagement, or careless supervision, at the Women and Children's Hospital. This is not likely to continue, but the Surgeon-General's attention will be directed to the matter.

13. The Government has perused with interest the professional reports of the Medical officers concerned, and particularly notices with satisfaction the success of Brigade-Surgeon-Lieutenant-Colonel Price's experiment in grass-farming, which has resulted, not only in an additional source of income to the General Hospital, but in, what is far more important, an improvement in its sanitary condition. His remarks in paragraph 5 (*h*) of the report (pages 26 and 27) will be communicated to the Local and Municipal Department.

14. The question of revising the charges for the "Officers' quarters" has already been referred to the Surgeon-General in G.O., dated 31st May 1895, No. 439. The Senior Medical officer's observations (page 28) on the subject have, no doubt, attracted the Surgeon-General's notice. The statement that the members of the steward's department at the General Hospital have to attend from 6-30 A.M. to 6 P.M. daily throughout the year and to take night duty once in six nights should be enquired into and a report submitted. The fact that the three stewards required assistance in their duties to give them time to check the storekeeper's expenditure and returns points, apparently, to a defect in system. The Surgeon-General will report fully on the existing arrangements. The *names* of patients who die in the Voluntary Venereal and other hospitals should be omitted from future professional reports; initials or numbers are sufficient.

15. With reference to the remarks under "*Midwives*" on page 7, the attention of the Surgeon-General will be invited to the paragraph regarding nursing at the Lying-in Hospital on page 50. Surgeon-Lieutenant-Colonel Sturmer appears to be rightly dissatisfied with the arrangements under which this important duty is carried out entirely by probationers. The Government is of opinion that a small permanent staff of nurses should be maintained. The Surgeon-General will report on the point. At page 29 it is stated that there were 26,570 "self-diets" in the native wards of the General Hospital, giving an average of 7·38 "self-diets" *per diem*. Either the latter figure is wrong or the method adopted in its calculation should have been explained.

16. His Excellency the Governor in Council has read with gratification the testimony borne by the Surgeon-General to the professional labours of Brigade-Surgeon-Lieutenant-Colonels Price and Brown and the other Medical officers mentioned in paragraphs 11 and 18 of the report.

265 & 3.28

17. It is observed that the report is dated th[illegible]but it was not received in print till the 16th July.

(True Extract.

J. F. PRICE,
Chief Secretary.

To the Surgeon-General.
" Examiner of Medical Accounts.
" Sanitary Commissioner.
" Financial Department.
" Local and Municipal Department.
" Accountant-General.

ENDORSEMENT—dated 28th August 1895, No. 713

Copy to the Government of India, [illegible]partment.

J. F. PRICE,
Chief Secretary.

Exd. A. Raitt.

Govt. of {1895
PUBLI

Issued

Recd.

G.O., &c., 28th Augu
Nos. 712, 713.

AUGUST.

State Hospitals.

Reviewing the annual report and statis
1894 of the — in the town of Madras.

[G / 9]
2,000—2-4-95.

Current No. 2
Public Department.

From Surgn General

No. 363

Dated 18/6

Received 16 July. 95

Enclosures
&c. 1

SUBJECT.

Submitting the Annual Report
and Statistics for 1894 for the
State Hospitals in Madras

Pub for No 387 dd 20-5-95 Hrs
-- 341 dd 4-5-95 Hrs
-- 447 dd 3-4-95 Hrs
965 dd 20-12-94
Est 849 dd 7-11-94 Dc
Pub 783 dd 22-10-94 Hrs abstr
-- 635 dd 31-8-94 Hrs
Ext 615-16 dd 8-8-94 Dc
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Fin 237 dd 6-3-94 Rs Hrs
Ext 965 dd 30-11-93 Hrs
Fin 920 dd 18-9-93
Pub 230 dd 12-1-92
-- 101-1-89
-- 369 dd 8-5-93
-- 770 dd 13-10-96
121 dd 19-2-92

CURRENT No. 2261

OFFICE OF SURGEON-GENERAL
13 JUL. 95
WITH GOVT. OF MADRAS.

CHIEF SECRETARY
13 JUL 1895
GOVERNMENT OF MADRAS

ANNUAL REPORT AND STATISTICS

FOR 1894

OF THE

STATE HOSPITALS

IN THE

PRESIDENCY TOWN OF MADRAS.

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

1895.

OFFICE OF SURGEON-GENERAL
WITH THE GOVERNMENT OF MADRAS,
Madras, 18th June 1895.

No. 363.

From

SURGEON-MAJOR-GENERAL C. SIBTHORPE, F.R.C.P.I.,
Surgeon-General with the Government of Madras,

To

THE HON. THE CHIEF SECRETARY TO GOVERNMENT,
Public Department.

SIR,

I have the honour to submit to the Right Honourable the Governor in Council the Annual Report and Statistics for 1894 for the State Hospitals in the town of Madras.

2. I have drawn up the report on a somewhat different system from previous ones with the view of showing more clearly the work done in each hospital and the relative cost.

3. As reported in my letter No. T-4—38, dated 29th November 1894, I have appointed a committee to propose rules under which a uniform system of keeping accounts will be adopted in all these hospitals, which rules, when adopted, will more clearly show the actual cost of the work done.

4. ACCOMMODATION.—The annexed statement shows the number of hospitals and the provision of beds for the accommodation of in-patients and their average daily attendance:—

Number.	Names of Hospitals.	Number of beds available.			Average daily sick.			
		Males.	Females.	Total.	Males.	Females.	Children.	Total.
1	General Hospital	375	...	375	280·13	0·53	0·66	281·32
2	Women and Children's Hospital	...	132	132	...	105·18	25·82	131·00
3	Government Lying-in Hospital	...	122	122	...	67·88	·46	68·34
4	Government Ophthalmic Hospital	42	34	76	32·01	22·67	1·57	56·25
5	Government Leper Hospital	186	44	230	161·18	51·36	6·18	218·72
6	Voluntary Venereal Hospital	...	100	100	...	65·75	...	65·75

In the General Hospital there were 72 more beds available during the year compared with the previous year due to the opening of the new wards finished in 1893.

There was an increase of 27·77 average daily in-patients. As yet the provision for treating women and children as in-patients has not been completed; the few cases treated were all special or emergent cases.

Under the orders of Government received on the 3rd April last, the accommodation for the treatment of women and children will shortly be ready. It will be seen that the other hospitals have been working fully up to their accommodation. In the Leper Hospital there were 44 beds available for females with an average daily attendance in-patients of 51·36, the excess being accommodated in the verandahs of the native female ward. This unsatisfactory state of overcrowding was brought to the notice of Government, and in G.O., No. 965, Public, dated 20th December 1894, Government directed the Superintendent to regulate admissions so as to prevent overcrowding.

5. TOTAL TREATED.—The following is the total number of sick treated in the State Hospitals including both in- and out-patients :—

General Hospital	56,310
Women and Children's Hospital	3,507
Government Lying-in Hospital (excluding 1,514 cases of natural labour)	25,416
Government Ophthalmic Hospital	9,955
Government Leper Hospital	528
Voluntary Venereal Hospital	662
Total ...	96,378

Besides the State Hospital in Madras, there are the following medical institutions treating sick in Madras as per list attached :—

Names of Institutions.	How supported.	Total in- and out-patients treated.
Black Town North Side Dispensary...	Municipality	44,184
Native Infirmary	Private (Monegar Choultry funds.)	2,803
Ramasawmy Lying-in Hospital ...	Private aided by Government ...	769
Marine Dispensary	Port funds	3,331
Civil Orphan Asylum	Private aided by Government ...	76
Military Female Orphan Asylum ...	Private (aided by Government by asylum funds.)	359
St. Thomé Dispensary	Mission aided by municipality ...	10,594
Triplicane Dispensary and Royapettah Hospital.	Municipality	31,977
Victoria Caste and Gosha Hospital and Dispensary.	Private aided by Government and municipality.	9,269
	Total ...	103,362

6. MORTALITY IN THE CITY OF MADRAS.—The following statement, kindly furnished by the Health Officer of Madras, gives a clear idea of the causes of mortality among the population :—

Deaths from the most prevalent diseases in the City of Madras for 1894 *and the ten previous years.*

Year.	Cholera.	Bowel-complaint.	Fever.	Small-pox.	Other causes.	Total.	Ratio per mille of population.
1884	1,193	2,574	3,779	4,064	8,513	20,123	44·4
1885	184	2,807	3,595	26	8,313	14,925	32·9
1886	4	2,586	3,801	1	8,307	14,699	32·4
1887	530	2,911	4,037	13	8,701	16,192	35·7
1888	543	2,568	3,372	36	8,920	15,439	34·1
1889	182	2,993	4,154	45	9,712	17,086	37·7
1890	744	2,704	4,685	78	8,983	17,194	37·9
1891	1,916	4,573	6,731	66	10,522	23,808	52·6
1892	611	3,958	6,889	27	9,362	20,847	46·0
1893	27	2,708	6,628	20	9,201	18,584	41·0
1894	77	2,392	6,128	12	7,933	16,542	36·5

It will be seen from the above mortality statement that while the year 1894 was a comparatively healthy one, the hospitals and dispensaries in the Presidency town were nevertheless marked by an increased attendance showing that they are steadily becoming popular. To the State Hospitals many of the patients come from all parts of the Presidency and adjoining States and also from over sea.

7. IN-PATIENTS.—The following statement shows the work done among in-patients :—

Names of Hospitals.	Total number of in-patients treated.	Cured.	Relieved.	Discharged otherwise.	Died.
General Hospital	5,495	2,542	1,395	953	366
Women and Children's Hospital ...	3,507	1,963	882	384	177
Lying-in Hospital	2,026	888	259	753	86
Ophthalmic Hospital	1,703	1,268	206	198	...
Leper Hospital	470	...	...	195	51
Voluntary Venereal Hospital ...	662	588	...	...	17

8. OUT-PATIENTS.—Subjoined is a comparative statement showing the number of out-patients treated with the daily average of men, women and children for three years :—

Names of Institutions.	Out-patients treated during			Daily average sick for											
				1894.				1893.				1892.			
	1894.	1893.	1892.	Men.	Women.	Children.	Total.	Men.	Women.	Children.	Total.	Men.	Women.	Children.	Total.
General Hospital ...	50,815	49,621	44,966	185·57	67·85	89·39	342·81	214·00	58·89	78·57	351·46	212·58	49·06	70·03	331·67
Women and Children's Hospital.	None.														
Lying-in Hospital ...	23,390	23,533	22,499	...	51·49	60·40	111·89	...	52·97	64·50	117·47	...	52·18	66·19	118·37
Ophthalmic Hospital ...	8,252	8,307	8,622	48·07	29·25	20·27	97·59	42·90	27·90	23·24	94·04	61·59	37·01	27·76	126·36
Leper Hospital	58	57	...	7·16	·94	·29	8·39	0·37	0·10	0·03	0·50	...	...	...	..
Voluntary Venereal Hospital.	None.														

Except in the General Hospital and the Lying-in Hospital there was no great increase or decrease in the sick treated as compared with the previous year.

General Hospital.—An increase of 1,005 sick in-patients treated this year is accounted for by the increase in the number of beds available. Among out-patients there was an increase of 1,194 compared with last year, which increase is due clearly to the increased popularity of the out-patient department.

Lying-in Hospital.—There were 295 in-patients and 143 out-patients less treated than in the previous year. There was also a decrease of 144 cases of natural labour. The decrease under in-patients is chiefly due to the falling off in the confinement cases which were 92 less than in last year.

9. MORTALITY.—A statement, showing the mortality among in-patients, is given below :—

Names of Hospitals.	Mortality.		Cases admitted moribund.	Cases removed moribund.	Deaths from septic diseases	
	Actual cause.	Number.			Acquired in hospital.	Acquired before admission.
General Hospital	Information not available.	366	...	...	...	...
Women and Children's Hospital		177	42	62	...	3
Lying-in Hospital		86	28	1	2	21
Ophthalmic Hospital		...	...	...	...	...
Leper Hospital		51	8	4	...	...
Voluntary Venereal Hospital		17	1	...	...	...

It gives, however, inadequate information which, I hope, will be more complete next year. No record of the mortality amongst in-patients is of any use, which does not deal with the actual causes of death so as to show clearly what cases die of septic diseases acquired in the hospital or acquired before admission. In this country particularly, a hospital should show what cases were brought for treatment in a moribund state and what cases were removed in a moribund state, as many natives wait until there appears to be no hope before bringing their friends for admission, and others object to their friends dying in a hospital and remove them just before death. I have already issued orders which will, it is to be hoped, obtain this information in full in future years.

10. CLASSES OF DISEASE TREATED.—The following figures show the principal classes of diseases treated in each of the general hospitals :—

General Hospital including out-patient department—

Malarial fevers	6,647		
Diseases of digestive system	4,859		
Diseases of skin	3,768	Local injuries ...	2,491
Diseases of ear	2,643	General injuries ...	80
Diseases of respiratory system ...	2,002		
Worms	1,719		

Lying-in Hospital including out-patient department (Egmore Dispensary)—

Diseases of digestive system	4,274		
Diseases of generative system ...	4,254		
Diseases of respiratory system ...	3,621	Local injuries ...	516
Worms	3,229	General injuries ...	40
Diseases of the ear	1,389		
Diseases of the skin	1,233		

Women and Children's Hospital including in-patients only—

Malarial fevers	586		
Debility	418		
Diseases of respiratory system ...	323	Local injuries ...	143
Rheumatic affection	207	General injuries ...	39
Dysentery	138		
Diarrhœa	127		

The 418 cases of debility returned from the Women and Children's Hospital can only mean, that the Medical officer in charge did not find out the cause of the debility and return the cases under the proper nomenclature.

11. OPERATIONS.—The following statement shows the number of surgical operations performed by the different Medical officers and subordinates during the year ;—

Names of Hospitals.	Operator.	Number of operations performed.	Period present for duty.
General Hospital.	Surgeon-Lieut.-Col. W. R. Browne, M.D. ...	195	11 months and 5 days.
	Surgeon-Lieut.-Col. H. Allison, M.D. ...	17	25 days.
	Surgeon-Major J. Maitland, M.D.	166	6 months and 5 days.
	Surgeon-Captain F. G. Crawford, M.D. ...	259	11 months.
	Surgeon-Captain D. Simpson, M.B.	7	2 months and 19 days.
	Surgeon-Captain R. Robertson, M.B. ...	4	6 months and 27 days.
	Surgeon-Captain A. E. Grant, M.B.	2	5 months and 9 days.
	Surgeon-Captain C. L. Williams, M.D. ...	166	1 year.
	Surgeon-Captain G. G. Gifford	9	8 months and 18 days.
	Dr. Innes	1	1 month and 24 days.
	Civil Apothecary M. C. Koman, L.M.S. ...	27	10 months.
	Civil Apothecary C. Dustaghiri Khan ...	1	4 months and 6 days.
	Civil Apothecary T. Ekambaram Pillai, L.M.S.	12	11 months and 25 days.
	Civil Apothecary C. M. Therumudisami, L.M.S.	45	1 year.
Women and Children's Hospital.	Brigade-Surgeon Lieut.-Col. A. L. Hackett.	57	1 year.
Lying-in Hospital.	Surgeon-Lieut.-Col. A. M. Branfoot, M.B. ...	70	1 month and 25 days.
	Surgeon-Major A. J. Sturmer	322	10 months and 4 days.
	Assistant Surgeon S. E. Falconer	86	9 months and 3 days.
	Civil Apothecary W. T. Kenny, L.M.S. ...	46	1 year.
	Civil Apothecary Balakristna Naidu ...	2	4 months and 28 days.
	Civil Apothecary A. Y. Narayana Iyer, L.M.S.	16	8 months and 15 days.
	Civil Apothecary T. V. Narayanasami Iyer, L.M.S.	1	6 months and 29 days.
	Medical Practitioner Volunteer Mrs. G. Stephens.	16	1 year.
	Medical Practitioner Miss A. Falconer ...	3	4 months.
	Hospital Assistant Jaganayakalu Raju ...	9	1 year.
Ophthalmic Hospital.	Surgeon-Major T. H. Pope, M.D.	1,816	1 year.

The admirable work done by Surgeon-Major Pope, Surgeon-Major Sturmer, Surgeon-Captain Crawford, Surgeon-Lieut.-Colonel Browne, Surgeon-Major Maitland and Surgeon-Captain Williams is worthy of approval.

12. CLASSES AND SEXES—*General Hospital.*—There is a marked increase of 428 among other classes treated during the year. This difference is over and above that which can be accounted for by the increase in the total treated. Probably there was a more correct registry maintained of the class of patients treated.

Lying-in Hospital.—As indicated by statistics this institution is resorted to by all classes of patients.

Voluntary Venereal Hospital.—As compared with the previous year there was a decrease among Europeans and Eurasians of 11 and 6, respectively, and an increase among Hindus and Muhammadans by 24 and 4 respectively.

13. TRAINING OF NURSES AND MIDWIVES.—The Senior Medical Officer of the General Hospital gives some interesting information on this subject in his attached administration report which, I hope, will go more fully into detail next year.

Midwives.—The Acting Superintendent, Government Lying-in Hospital, states that "European and Eurasian applicants for the post of nurse have first to fill in a form regarding age, character, &c., and, if satisfactory, the applicant's name is registered, and when a vacancy occurs a notice to join is sent to her. For the first three months she learns general nursing and bandaging at the Women and Children's Hospital, and is then transferred to the gynæcological wards of the Lying-in Hospital, where she spends another three months in learning special nursing in the diseases of women. At the end of six months she is examined and, if passed, receives a diploma of sick nursing. She is then transferred to the lying-in wards; here she spends six months, and at the end of that time is examined in midwifery. She, as a rule, conducts personally not less than forty cases and sees perhaps about one hundred labours, and she witnesses all obstetric operations that occur during the day time. Government allow nine stipends of Rs. 15 each for nurse pupils and nine for midwifery pupils. Native applicants have also to fill in a form. They have to spend twelve months at the Lying-in Hospital; part of this time is spent in the gynæcological wards. They attend personally about thirty cases of labour under supervision."

14. DENTAL SURGEON.—The Professor of Dental Surgery and Government Dental Surgeon Mr. Badcock, who was appointed under G.O., No. 849, dated 7th November 1894, Educational, joined the General Hospital on the 15th November 1894, and carried out treatment of cases as follows:—

Extractions	67
Fillings	1
Other treatment	13
Total ...	81

15. FINANCE—*Income.*—The total income for the year 1894 was Rs. 3,53,050–1–1 as against Rs. 3,64,966–4–5 in 1893, showing a decrease of Rs. 11,916–3–4 over last year. Of this sum, Rs. 3,30,743–9–4 was drawn from the treasury and compares favourably with the corresponding figures for 1893, viz., Rs. 3,44,678–9–5, notwithstanding a general increase in the total number of sick treated during 1894. The sum of Rs. 21,481–2–8 was recovered from paying patients. The sum of Rs. 825–5–1 was from miscellaneous sources consisting of such items as fines on contractors, sale proceeds of unserviceable and condemned articles, grass, &c.

Expenditure.—Rs. 59,442–8–9 of the total receipts were expended on salaries of Medical officers against Rs. 48,583–7–3 in the preceding year. The increase was chiefly due to the increase in the General, Women and Children's and Lying-in Hospitals as explained below:—

General Hospital.—(1) The increase is accounted for by the inclusion of the pay of the additional Medical officer for twelve months in 1894 as against six months in 1893; (2) to the increased salaries of four civil apothecaries for six months in 1894; (3) to the sick leave allowance drawn in 1894 for one First-class Hospital Assistant.

Women and Children's Hospital.—The increase is explained as due to the amount of exchange compensation allowance accruing to the Medical officer in charge, to the higher salary drawn by the Senior Medical subordinate who is a Senior Assistant Surgeon and Honorary Surgeon-Captain, and to the increased rate of pay of the Civil Apothecary from July 1894.

Lying-in Hospital.—The increase is due to the higher rate of pay drawn on promotion by certain Medical subordinates attached to the hospital and the privilege leave allowance granted to a Hospital Assistant. The pay of the extra Medical subordinate (sent to be under observation and supervision) has also tended to increase the cost under this head; this does not appear to be a proper charge against the hospital, as he belonged to the reserve provincial establishment.

Under Inferior Dispensary Establishment.—There was an increase of Rs. 5,181–11–2 as compared with last year—*vide* statement attached.

Comparative Statement showing the Expenditure under Inferior Dispensary Establishment of the State Hospitals.

Hospital.	1894.	1893.	Increase.	Decrease.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
General Hospital	33,645 10 8	28,622 11 10	5,022 14 10	.....
Women and Children's Hospital	3,054 0 0	3,050 0 0	4 0 0	.....
Lying-in Hospital	13,469 1 8	13,322 6 11	146 10 9	.....
Ophthalmic Hospital	3,842 0 0	3,710 0 0	132 0 0	.....
Leper Hospital	2,863 10 2	3,007 14 5	.....	144 4 3
Volunteer Venereal Hospital	2,026 8 6	2,006 2 8	20 5 10	.....

In the General Hospital, Rs. 5,022–14–10 is shown as an increase under this heading which is due to —

(1) the exchange compensation allowance paid to the Matron Superintendent for twelve months in 1894 as against ten months in 1893;

(2) the extra nurses sanctioned for the new wards on the third storey in G.O., No. 965, dated 30th November 1893, Public Department;

(3) the pay of the Kitchen Steward sanctioned in G.O., No. 971, dated 30th November 1893, Public Department, and G.O., No. 237 R., dated 6th March 1894, Financial Department;

(4) the pay of three extra writers (one to Assistant Surgeon and two to Steward's department) sanctioned in G.O., No. 783, dated 23rd October 1894, Public Department;

(5) extra ward attendents, extra cook and mussalchee, extra bearers, toties and sweeper sanctioned in G.O., No. 965, dated 30th November 1893, Public Department.

Bazaar medicine.—The outlay under this head shows a considerable decrease as compared with last year, viz., Rs. 4,634–5–11, and is due to the more correct entry of charges under their proper heads.

European medicines.—The variations under this head are not very great and do not call for any special remarks, except in the Leper, Lying-in and Women and Children's Hospitals. The Leper Hospital shows a decrease, while the other two show an increase over last year. In the Women and Children's Hospital, a large supply was indented for to provide for the increasing number of daily average sick, which was 131 in 1894 against 120·32 in the preceding year. This explanation does not satisfy me, and as this hospital will be amalgamated with the General Hospital this year, I am sure its expenditure will be more closely looked after in future. In the Lying-in Hospital the increase is explained as being due to the inclusion of the cost of medicines supplied during 1893 on supplementary indent, and to the supply, during the year, of some special instruments. In the Leper Hospital, as observed above, there was a decrease.

Diet.—Except in the Leper Hospital where there was a saving of Rupees 5,244–13–10, the other hospitals do not show any great variation so as to need any special remark. In the Leper Hospital the reduction under this head was owing to attention being paid to this office Circular No. 3291 of 6th June 1894, which reads as follows:—

"It having been brought to the notice of the Surgeon-General that in some hospitals the daily diet registers are not properly kept up, the attention of all medical officers in charge of Presidency hospitals is drawn to G.O., No. 1, of 1st January 1889, on the subject and they are directed to see that in future each column of the register is daily filled in completely.

"2. Whenever the monthly rate laid down in paragraph 6 of the rules in the G.O. quoted above, viz., four annas for natives and eight annas for Europeans daily is exceeded, a special report should be submitted to this office with the bed-head diet sheet on which the expenditure has been excessive attached and on the back of each of these the medical officer concerned should record his reasons for excess in expenditure."

The cost of European diet per head at no time during the year exceeded eight annas, except in the Lying-in Hospital where the cost per head averaged nine annas and seven pies. The special requirements of this institution sufficiently explain this increase. But in none of the institutions the cost of native diet per head exceeded four annas during the year.

The average cost of each diet was As. 5–5; this represents the average of the figures in column 6 of Statement V, Part I.

Miscellaneous Charges amounted to Rs. 76,701–3–10 as against Rupees 64,065–15–10 in 1893, showing an increase of Rs. 12,635–4–0; this is chiefly due to the large amount of money remitted to the Treasury, being recoveries from paying patients and fines from contractors, &c., and to the inclusion, under this head, of certain charges which were shown last year under bazaar medicines.

Buildings and Repairs.—The outlay on buildings and repairs was comparatively small, there being few original works undertaken or completed during the year. Of the total amount shown as spent under this head, Rs. 7,833–7–7 were spent on new constructions, and Rs. 12,834–10–10 on repairs generally, including white-washing, &c.

Cost per patient.—A comparative statement, showing the actual cost per patient under each head, is given below :—

Year.	Medical officers.	Inferior Dispensary Establishment.	Bazaar medicines.	European medicines.	Diet.	Miscellaneous charges.	Buildings and repairs.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1894	0 9 10	0 9 9	0 0 ·90	0 5 1	7 10 5	0 12 9	0 3 5
1893	0 8 2	0 9 1	0 0 10	0 5 1	8 5 4	0 10 10	0 9 0

This statement will be more useful in future years when the new rules, regarding the uniform system of account, come into force and when a correct deduction is made for the cost of out-patients in the hospitals where there are out-patient departments. Attention on the part of responsible medical officers to the varying cost under the different heads in each hospital will show them where their care is requied.

16. Verification of stock.—The orders in G.O., No. 6639, dated 7th October 1893, concerning the checking of the stock of all valuable Government property were carried out in each of the hospitals and in my office during the year.

17. Service Books.—The orders in G.O., No. 991, Pension, dated 11th August 1894, regarding the checking of the service books in all the hospitals and in my office have been duly attended to.

18. Inspections.—I visited each of these hospitals on several occasions during the year and either recorded my remarks in the Visitors' books, or called the attention of the medical officer in charge to any points upon which I considered it desirable he should take action. I cannot speak too highly of the great care and attention Brigade-Surgeon-Lieutenant-Colonel Price and Surgeon-Lieutenant-Colonel Browne, for the time he was acting, have devoted to the administration of the General Hospital. Surgeon-Major Pope has devoted much care to his hospital, and I was well pleased with every arrangement in it on the last occasion I visited the hospital.

19. Professional Reports.—The reports of the medical officers, in charge of each of these institutions, are attached as appendices. These contain a record of good work well done in the clinical hospitals, viz., the General, the Lying-in and the Ophthalmic. An attempt has been made to make these reports of the Leper and the Voluntary Venereal hospitals more useful than they were and these will doubtless gradually improve, now that the attention of the medical officers has been called to their importance. If Government sanctions the proposal in my letter No. T-121—printed in G.O., Educational, Nos. 615 and 616 of 18th August 1894—dated 11th July 1894, to appoint the assistants to the Professors in the College as Registrars in the clinical hospitals, the value of the professional portion of these reports will be greatly enhanced.

I have the honour to be,

Sir,

Your most obedient servant,

C. Sibthorpe Surgeon-Major-Genl.,

Surgeon-General with Government,

HOSPITAL STATISTICS.

Nos. II, III, III-A, IV, V, V—Part I.

HOSPITAL STATISTICS—*cont.*

No. II.—*Statement showing the Number of In-door and Out-door Patients treated in the State Hospitals in the Presidency Town during the year* 1894.

1	2	3												4				5
		In-door Patients.												Out-door Patients.				
		a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*		*h.*				*a.*	*b.*	*c.*	*d.*	
Number.	Names of Hospitals.	Total treated during the year.	Number cured.	Number relieved.	Discharged otherwise.	Died.	Ratio of deaths per cent. of total treated.	Number of beds available.		Daily Average Number.				Number treated.			Average daily attendance.	Total number of patients treated, both in-door and out-door.
								Males.	Females.	Men.	Women.	Children.	Total.	Attended personally.	Represented by friends.	Total treated.		
1	General Hospital	5,495	2,542	1,395	953	366	6·6	375	...	280·13	0·53	0·66	281·32	50,642	173	50,815	342·81	56,310
2	Women and Children's Hospital	3,507	1,963	882	384	177	5·04	...	132	...	105·18	25·82	131·00	...	...	...	...	3,507
3	Lying-in Hospital ...	2,026	888	259	753	86	4·24	...	122	...	67·88	0·46	68·34	23,168	222	23,390	111·89	25,416
4	Ophthalmic Hospital ...	1,703	1,268	206	198	...	...	42	34	32·01	22·67	1·57	56·25	8,252	...	8,252	97·59	9,955
5	Leper Hospital	470	...	...	195	51	10·85	186	44	161·18	51·36	6·18	218·72	58	...	58	8·39	528
6	Voluntary Venereal Hospital	662	588	...	...	17	2·56	...	100	...	65·75	...	65·75	...	...	...	...	662
	Total ...	13,863	7,249	2,742	2,483	697	5·02	603	432	473·32	313·37	34·69	821·38	82,120	395	82,515	560·68	96,378

HOSPITAL STATISTICS—*cont.*

No. III.—*Statement showing the Diseases of the In-door and Out-door Patients treated in the State Hospitals in the Presidency Town during the year* 1894.

| 1 | 2 | 3 | | | | | | | | | | | |

HOSPITAL STATISTICS—*cont.*

No. III-A.—*Statement showing the Results of the Major Surgical Operations performed among In- and Out-Patients in the State Hospitals in the City of Madras during the year* 1894.

Class of Operations.	Nature of Operations.	Remaining on 31st December 1893.	Performed during the year.	Total.	Results.				
					Cured.	Relieved.	Discharged otherwise.	Died.	Remaining under treatment on 31st December 1894.
Removal of tumours from parts.	Removal of 'all other tumours'.	6	148	154	109	10	7	13	15
	For hydatid cysts — (*e*) By removal of hydatid cyst of kidney	...	1	1	...	...	...	...	1
Opening of abscesses.	Incision of large abscesses or those in an important region or dangerous neighbourhood.	4	143	147	108	11	4	18	6
Operations on nerves.	Stretching of nerve	...	1	1	1	...	...	...	...
Operations on the eye and its appendages.	For entropion	...	7	7	6	1	...	...	...
	For symblepharon and ankyloblepheron	...	1	1	1	...	...	...	...
	For trichiasis	...	5	5	5	...	...	...	...
	For strabismus	...	2	2	2	...	...	...	...
	For pterygium	...	34	34	34	...	...	...	...
	For fistula lachrymalis and lachrymal obstruction ...	6	109	115	49	62	...	...	4
	Artificial pupil	1	169	170	80	89	...	...	1
	Iridictomy	...	241	241	167	70	...	...	4
	Iridotomy	...	5	5	2	3	...	...	...
	Extraction of the lens	26	1,090	1,116	1,004	7	102	...	3
	Laceration of opaque capsule.	...	60	60	59	1	...	...	...
	Extraction of opaque capsule.	...	14	14	12	2	...	...	...
	Removal of soft matter after cataract extraction	...	24	24	24	...	...	...	...
	Puncture of the globe	...	3	3	...	3	...	...	...
	Paracentesis for Hypopion ...	...	7	7	7	...	...	...	...
	Excision of the eyeball ...	...	30	30	29	...	1	...	...
Operations on the ear.	Removal of polypus	...	4	4	4	...	...	...	...
	Perforation of mastoid cells ...	1	1	2	1	1	...	...	...
Operations on the nose.	Extraction of nasal polypus — (*a*) Through the natural passages	...	10	10	10	...	...	...	...
	Removal of nasopharyngeal polypus.	...	3	3	1	...	1	1	...
Operations on other parts of the head and face including the mouth.	Trephining	...	1	1	...	1	...	...	...
	Raising and removing depressed bone	1	...	1	1	...	...	...	...
	Removal of tonsils	...	6	6	6	...	...	...	...
	Removal of submaxillary gland	...	1	1	...	1	...	...	...
	For harelip	...	2	2	2	...	...	...	...
Operations on the circulatory organs.	Ligature of artery	...	1	1	1	...	...	...	...
	Ligature of artery for aneurysm	...	1	1	...	...	...	1	...
Operations on the respiratory organs.	Laryngotomy	...	3	3	1	...	1	...	1
	Tracheotomy	1	3	4	2	1	1	...	...
	Cricothyroid laryngotomy ...	...	1	1	...	...	1	...	...
	Paracentesis of pleura	...	11	11	...	11	...	...	...
	(*a*) With excision of part of rib	2	1	3	1	1	...	1	...
Operations on the digestive organs.	Excision of portion of intestine.	...	1	1	1	...	...	1	...
	Colotomy— (*a*) Inguinal	...	6	6	1	1	1	3	...
	For stricture of the rectum— (*a*) By incision	...	3	3	1	2	...	...	...
	Division of the sphincter ani ...	...	2	2	2	...	...	...	...
	Removal of polypus of rectum.	...	2	2	...	1	1	...	...
	For hæmorrhoids	1	36	37	33	1	1	1	1
	Abdominal section	1	8	9	2	...	...	7	...
	Abdominal section and artificial anus	...	1	1	...	...	...	1	...

HOSPITAL STATISTICS—*cont.*

No. III-A.—*Statement showing the Results of the Major Surgical Operations performed among In- and Out-Patients in the State Hospitals in the City of Madras during the year* 1894—cont.

Class of Operations.	Nature of Operations.	Remaining on 31st December 1893.	Performed during the year.	Total.	Results.				
					Cured.	Relieved.	Discharged otherwise.	Died.	Remaining under treatment on 31st December 1894.
Operations on the digestive organs — *cont.*	Paracentesis of the abdomen ...	1	157	158	2	153	1	1	1
	For prolapsus	...	3	3	1	1	1	...	...
	Incision and erasion for fistula in ano...	...	5	5	3	1	...	...	1
	Scraping and cauterizing ulcer of rectum	...	1	1	1	...	...	...	...
	Linear proctotomy	...	1	1	...	...	...	...	1
Operations on hernia.	Herniotomy	...	21	21	9	1	...	11	...
	Radical cure	1	34	35	32	...	1	...	2
	Herniotomy and radical cure...	...	2	2	2	...	...	...	...
Operations on the lymphatic glands.	Removal of diseased glands ...	5	22	27	15	9	2	...	1
	Incision and scraping	...	20	20	15	3	...	1	1
	Incision and drainage	...	1	1	...	1	...	...	...
Operations on the thyroid body.	Tapping and injection of bronchocele	...	2	2	...	2	...	...	...
Operations on the urinary organs.	Incision and drainage of bladder for rupture	...	1	1	...	...	...	1	...
	Incision and drainage of bladder through vagina	...	1	1	1	...	...	...	...
	Tapping of bladder— (*a*) above the pubes	...	4	4	1	2	1	...	...
	Removal of vesical calculi— By lithotomy— (*a*) supra-pubic	...	7	7	7	...	...	...	...
	Lithotrity	...	1	1	1	...	...	...	...
	(*b*) Extraction of fragments	...	1	1	1	...	...	...	...
	By litholapaxy and perineal urethrotomy	...	2	2	1	...	...	1	...
	For stricture of the urethra— (*a*) By forcible dilatation ...	...	6	6	5	1	...	...	1
	(*b*) By internal urethrotomy.	...	3	3	2	...	...	...	...
	(*c*) External urethrotomy or perineal section ...	3	39	42	28	3	4	4	3
	Perineal section for extravasation of urine	...	2	2	1	...	...	1	...
	Incision for extravasation of urine	...	4	4	1	...	3	...	...
	Median cystotomy	...	1	1	...	...	...	1	...
Operations on the male generative organs.	Replacement of retracted testicle	...	1	1	1	...	...	...	...
	Excision of hydrocele of the cord	...	3	3	3	...	...	...	...
	Exploratory operation for hydrocele of the cord ...	...	1	1	1	...	...	...	...
	Destruction of phagedenic ulcer of penis by scraping and cautery	...	1	1	...	1	...	...	...
	Radical cure of hydrocele— (*a*) Tapping and injection ...	2	58	60	41	3	15	...	1
	(*b*) Incision and drainage ...	...	11	11	10	1	...	...	...
	(*c*) Resection of tunica vaginalis	2	21	23	21	1	...	...	1
	For hæmatocele	...	3	3	3	...	...	...	...
	Castration	1	5	6	4	1	...	1	...
	For hernia testis (plastic operation)	...	1	1	1	...	...	...	...
	Excision of veins for varicocele	1	4	5	5	...	...	...	...
	Incision and scraping of sloughing scrotum	...	1	1	1	...	...	...	...
Operations on the female generative organs.	Ovariotomy	2	15	17	17	...	...	...	...
	Paracentesis of ovarian cysts and of cysts in broad ligament	...	1	1	...	1	...	...	...

HOSPITAL STATISTICS—*cont.*

No. III-A.—*Statement showing the Results of the Major Surgical Operations performed among In- and Out-Patients in the State Hospitals in the City of Madras during the year* 1894—cont.

Class of Operations.	Nature of Operations.	Remaining on 31st December 1893.	Performed during the year.	Total.	Results. Cured.	Relieved.	Discharged otherwise.	Died.	Remaining under treatment on 31st December 1894.
Operations on the female generative organs.	Removal of cysts and growths in the broad ligament and par ovarium	...	2	2	...	...	...	2	...
	Removal of the uterine appendages	...	4	4	3	...	...	...	1
	Abdominal section for pelvic peritonitis, cellulitis or intra-peritoneal hæmatocele	...	1	1	...	...	...	1	...
	Removal of fœtus in ectopic or extra uterine gestation	...	1	1	1	...	...	...	...
	Removal of cervix uteri	1	5	6	6	...	...	...	...
	For removal of uterus above cervix	2	2	4	4	...	...	...	...
	For removal of whole uterus— (a) Abdominal and vaginal combined	...	1	1	1	...	...	...	...
	(b) Vaginal	...	1	1	...	...	...	...	1
	For suturing uterus to abdominal wall—hysteropexy	...	1	1	1	...	...	...	...
	For enlarging os and cervix uteri	...	34	34	29	3	...	...	2
	For lacerated or fissured cervix uteri	...	13	13	12	1	...	...	...
	Scraping the cavity of the uterus	...	36	36	24	8	...	2	2
	For atresia of vagina or uterus	...	13	13	10	2	...	...	1
	For contracting the vagina	...	10	10	7	1	2	...	...
	For recto-vaginal fistula	1	5	6	2	3	1	...	...
	For vesico-vaginal fistula	9	55	64	17	26	19	...	2
	For ruptured perineum	...	29	29	25	4	...	...	...
	For extra peritoneal hæmatocele or pelvic abscess	...	5	5	3	...	...	2	...
	For elephantiasis of labia	...	1	1	...	1	...	...	...
	For retained menstrual fluid	...	2	2	1	1	...	...	...
	For polypoid growths from interior of uterus	...	4	4	4	...	...	...	...
	For malignant growth from the cervix uteri	...	2	2	2	...	...	...	...
	Application of caustics to the interior of uterus	...	2	2	2	...	...	...	...
	Intraparenchymatous injection of alcohol for epithelioma of uterus	...	1	1	...	1	...	...	...
	Amputation of clitoris and scraping lupoid ulcer	...	1	1	1	...	...	...	...
	Destruction of syphilitic ulcer of pudendum by scraping or caustics	1	9	10	5	5	...	...	...
Obstetric operations.	Application of forceps	4	161	165	151	1	...	10	3
	Version	3	17	20	17	...	...	3	...
	Embryotomy— (b) Decapitation	...	4	4	4	...	...	...	...
	Cephalotripsy	...	27	27	16	2	...	9	...
	Cæsarian section— (a) simple	...	2	2	1	...	...	1	...
	For adherent placenta	...	13	13	8	...	...	5	...
	For induction of labour	2	11	13	13	...	...	...	...
	For removal of ovum— (1) in abortion	2	35	37	34	...	...	1	2
	(2) moles or diseased membranes	...	6	6	6	...	...	...	...
	Extraction	...	6	6	6	...	...	...	...
	Symphysiotomy	...	1	1	1	...	...	...	...
	Abdominal section for rupture of vagina	...	1	1	...	...	...	1	...
Operations on the breast.	Removal of breast	...	4	4	3	...	...	...	1
Operations on bones.	Osteotomy	...	1	1	1	...	...	...	...
	Incision and erasion for caries or necrosis	...	29	29	11	9	4	1	4

HOSPITAL STATISTICS—*cont.*

No. III-A.—*Statement showing the Results of the Major Surgical Operations performed among In- and Out-Patients in the State Hospitals in the City of Madras during the year* 1894—cont.

Class of Operations.	Nature of Operations.	Remaining on 31st December 1893.	Performed during the year.	Total.	Results. Cured.	Relieved.	Discharged otherwise.	Died.	Remaining under treatment on 31st December 1894.
Operations on bones —*cont.*	Excision of bone	2	1	3	...	2	...	...	1
	Removal of large or deep sequestra	5	29	34	14	14	3	1	2
	Opertion for ununited fracture.	...	2	2	1	1	...	...	...
Operations on joints.	Reduction of dislocations	...	25	25	24	1	...	...	...
	Forcible extension or flexion	1	18	19	7	7	2	...	3
	Incision and drinage	...	4	4	1	1	...	2	...
	Incision and scraping	...	2	2	...	1	...	...	1
	Excision	...	4	4	2	1	...	...	1
Operations on muscles tendons, faciæ and bursæ.	Tenotomy	...	1	1	...	1	...	...	...
	Division of cicatricial adhesions	...	3	3	1	1	...	...	1
Amputations.	Shoulder joint	...	1	1	...	...	...	1	...
	Fore-arm	1	2	3	2	1	...	...	...
	Wrist joint	...	1	1	...	1	...	...	...
	Metacarpo-phalangeal joint	...	2	2	2	...	...	...	...
	Thumb and fingers	...	2	2	2	...	...	...	...
	Thigh	...	3	3	3	1	...	...	...
	Knee joint	1	3	4	4	...	...	1	...
	Leg	1	7	8	5	...	...	...	2
	Foot	1	7	8	5	2	...	...	1
	Toe with metatarsal bone	1	...	1	1	...	...	...	...
On skin	Scraping of ulcers	1	11	12	6	4	1	1	...
	Total	* 107	†3,355	3,462	2,515	572	181	114	80

* The number remained on the last day of 1893 should be 107 as shown here and not 101 as shown in last year's report.

† Of these, 264 were performed by medical subordinates.

HOSPITAL STATISTICS—*cont.*

No. IV—*Statement showing the classes and Sexes of the In-door and Out-door Patients treated in the State Hospitals in the Presidency Town during the year* 1894.

1	2	3				4					5							
		Treated during the year 1894.				Classes.					Daily attendance.							
						a.	*b.*	*c.*	*d.*	*e.*	Average number.				Ratio per cent.			
Number.	Names of Hospitals.	Men.	Women.	Children.	Total.	Europeans.	Eurasians.	Hindus.	Musulmans.	Other classes.	Men.	Women.	Children.	Total.	Men.	Women.	Children.	Total.
1	General Hospital	33,037	9,625	13,648	56,310	1,250	8,731	43,136	2,689	504	465·70	68·38	90·05	624·13	74·62	10·95	14·43	100
2	Women and Children's Hospital	...	2,735	772	3,507	40	1,174	873	83	1,337	...	105·18	25·82	131·00	...	80·29	19·71	100
3	Lying-in Hospital ...	...	12,323	13,093	25,416	516	5,793	10,034	1,055	8,018	...	119·37	60·86	180·23	....	66·23	33·77	100
4	Ophthalmic Hospital ...	5,519	2,939	1,497	9,955	205	759	7,495	882	614	80·08	51·92	21·84	153·84	52·05	33·75	14·20	100
5	Leper Hospital	417	99	12	528	...	49	379	50	50	168·34	52·30	6·47	227·11	74·12	23·03	2·85	100
6	Voluntary Venereal Hospital	...	662	...	662	25	24	578	35	...	...	65·75	...	65·75	...	100	...	100
	Total ...	38,973	28,383	29,022	96,378	2,036	16,530	62,495	4,794	10,523	714·12	462·90	205·04	1,382·06	51·67	33·49	14·84	100

HOSPITAL STATISTICS—*cont.*

No. V.—*Statement showing the Income on account of the State Hospitals in the Presidency Town during the year* 1894.

1	2	3										
		Income.										
		a.	*b.*									
			From Government.									
			As salaries.									
Number.	Names of Hospitals.	Cash balance on 1st January 1894.	Medical Officers.	Inferior Dispensary Establishment (including Menial Servants).	As Registers and Forms.	As European Medicines.	For Diet including Police cases.	Sale of Medicines supplied by Government.	Special allowances given by Government.	Total.		
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.		
1	General Hospital 1773	.....	18,381 8 6	33,645 10 8	969 5 8	20,016 4 4	39,480 0 11	.....	39,844 11 3	1,52,337 9 4		
2	Women and Children's Hospital 1844	.....	25,366 13 3	3,054 0 0	97 9 0	3,433 6 7	19,839 0 5	.....	8,290 14 3	60,081 11 6		
3	Lying-in Hospital 1844	.....	9,080 8 8	13,469 1 8	331 6 8	6,017 9 1	16,472 0 8	.....	15,491 8 3	60,862 3 0		
4	Ophthalmic Hospital 1819	.....	3,720 0 0	3,842 0 0	92 0 0	284 7 3	5,264 6 0	.....	2,382 3 4	15,585 0 7		
5	Leper Hospital 1841	.....	960 0 0	2,860 10 2	35 3 0	476 7 9	18,750 12 0	.....	6,308 0 0	29,394 0 11		
6	Voluntary Venereal Hospital 1868	.....	1,933 10 4	2,026 8 6	17 5 6	555 9 3	6,264 8 1	.....	1,685 6 4	12,483 0 0		
	Total ...	.....	59,442 8 9	58,900 15 0	1,542 13 10	30,783 12 3	1,06,070 12 1	.....	74,002 11 5	3,30,743 9 4		

3—*cont.*

Number.	Names of Hospitals.	Income—*cont.*									
		c.		*d.*	*e.*	*f.*		*g.*	*h.*	*i.*	*j.*
		From Local or other Funds.		Interest on Investment.	Sale of Securities or withdrawal of Deposits.	Subscriptions		For Diet (by paying patients, &c.).	From sale of Medicines not supplied by Government.	Miscellaneous receipts.	Total Income.
		Local Funds.	Municipal Funds.			From Europeans.	From Natives.				
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1	General Hospital 1773	.....	.....	.....	.....	.....	.....	11,463 14 8	.....	*611 11 7	1,64,413 3 7
2	Women and Children's Hospital 1844	.....	.....	.....	.....	.....	.....	1,371 4 0	.....	† 24 2 0	61,477 1 6
3	Lying-in Hospital 1844	.....	.....	.....	.....	.....	.....	7,391 0 0	.....	† 99 8 0	68,352 11 0
4	Ophthalmic Hospital 1819...	.....	.....	.....	.....	.....	.....	1,255 0 0	.....	‡ 33 6 6	16,873 7 1
5	Leper Hospital 1841	.....	.....	.....	.....	.....	.....	.....	.....	§ 30 5 0	29,424 5 11
6	Voluntary Venereal Hospital 1868	.....	.....	.....	.....	.....	.....	.....	.....	¶ 26 4 0	12,509 4 0
	Total ...	.....	.....	.....	.....	.....	.....	21,481 2 8	.. ...	825 5 1	3,53,050 1 1

* Fines on contractors ... ... Rs. 222 9 7
Sale of grass, &c. 389 2 0
† Sale proceeds of condemned articles 24 2 0

‡ Diploma fees ... ... Rs. 79 8 0
Fees paid for clinical course ... 20 0 0
§ Fines, &c. 12 0 0
Sale of unserviceable articles ... 21 6 6

‖ Sale of unserviceable articles and grass on the compound— Rs. 26 4 0
¶ Sale proceeds of glass lamps ...

HOSPITAL STATISTICS—*cont.*

No. V—Part I.—*Statement showing the Expenditure on account of the State Hospitals in the Presidency Town during the year* 1894.

Number.	Names of Hospitals.	4 Expenditure. a. On Establishment. Paid by Government as Salaries. Medical Officers.	Inferior Dispensary Establishment (including Menial Servants). Compounders, Dressers, &c.	Menial Servants.	Paid from Local sources on Salaries. Medical Officers.	Inferior Dispensary Establishment (including Menial Servants). Compounders, Dressers, &c.	Menial Servants.	b. On Bazaar Medicines.	c. On European Medicines.	d. On Diet.	e. On Miscellaneous Charges (including Registers, &c., supplied by Government).	f. On Buildings or Repairs.	g. Invested during the year.	h. Total Expenditure during the year.	5 Cash Balance in hand on 31st December 1894.	6 Average Cost of each Diet.	7 Percentage of Total Cost paid by Government.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs.	Rs. A. P.	
1	General Hospital ...	18,381 8 6	23,169 6 9	10,476 3 11	...	...	...	207-12 7	20,016 4 4	39,480 0 11	* 40,364 1 5	† 12,317 13 2	...	1,64,413 3 7	...	0 6 3	‡ 100 0 0
2	Women and Children's Hospital	25,366 13 3	1,068 0 0	1,986 0 0	...	...	...	101 4 6	3,483 6 7	19,839 0 5	§ 8,624 15 1	‖ 1,057 9 8	...	61,477 1 6	...	0 6 8	¶ 100 0 0
3	Lying-in Hospital ...	9,080 8 8	9,270 9 7	4,198 8 1	...	...	...	161 1 0	6,017 9 1	16,472 0 8	** 17,978 10 11	†† 5,173 11 0	...	68,352 11 0	...	0 6 7	‡‡ 100 0 0
4	Ophthalmic Hospital ...	3,720 0 0	1,652 0 0	2,190 0 0	...	...	...	3 0 2	284 7 3	5,264 6 0	§§ 2,244 4 3	‖‖ 1,515 5 5	...	16,873 7 1	...	0 5 4	¶¶ 100 0 0
5	Leper Hospital ...	960 0 0	779 12 0	2,088 14 2	...	...	...	1 8 0	476 7 9	18,750 12 0	*** 5,992 15 0	††† 379 1 0	...	29,424 5 11	...	0 3 11	100 0 0
6	Voluntary Venereal Hospital	1,983 10 4	...	2,026 8 6	...	...	...	8 0 6	555 9 3	6,264 8 1	‡‡‡ 1,496 5 2	§§§ 224 10 2	...	12,509 4 0	...	0 3 11	100 0 0
	Total ...	59,442 8 9	35,939 12 4	22,961 2 8	...	...	...	§82 10 9	30,783 12 3	1,06,070 12 1	76,701 3 10	20,668 2 5	...	3,53,050 1 1	...	0 5 5	100 0 0

* Includes Rs. 12,075–10–3 remitted to Treasury—*Vide* columns 3 (*g*) and 3 (*i*) of statement V (Income).
† On Buildings Original works ... Rs. 6,556 8 4
On Repairs ... ... „ 5,761 4 10
‡ Average of European General Wards Rs. 0 7 3
Do. Officers' Quarters... ... „ 1 1 9
Do. Native General Wards ... „ 0 3 9
Do. Officers' Quarters... ... „ 0 13 9
§ Includes Rs. 1,395–6–0 remitted to Treasury.
‖ Repairs.
¶ European ... ... Rs. 0 8 1
Native ... ... „ 0 3 3
** Includes Rs. 7,490–8–0 remitted to Treasury.
†† Original works ... ... Rs. 97 10 8
Repairs ... ... „ 5,076 0 4
‡‡ For European, Special ... ... Rs. 0 14 9
Do. Ordinary ... ... „ 0 8 5
For Native ... ... Rs. 0 3 10
§§ Includes Rs. 1,288–6–6 remitted to Treasury.
‖‖ Original works ... ... Rs. 1,179 4 7
Repairs ... ... „ 336 0 10
¶¶ Europeans ... ... „ 0 7 1
Natives .. .. „ 0 3 7
*** Includes Rs. 30–5–0 remitted to Treasury.
††† On Repairs.
‡‡‡ Includes Rs. 26–4–0 remitted to Treasury.
§§§ General repairs including whitewashing.

APPENDIX I.

Statement showing the Average Cost per head of patient treated in the State Hospitals in the City of Madras for the year 1894.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Name of Hospital.	Number of beds available.	Average number of beds occupied.	In-patients.	Out-patients.	Total treated.	Total cost.	Average cost of patient on total cost.	Total cost on establishment.	Average cost per patient treated on establishment.	Total cost of bazaar medicines.	Average cost per patient treated on bazaar medicines.	Total cost of European medicines.	Average cost per patient on European medicines.	Total cost of diets.	Average cost per in-patient on diet.	Total cost of miscellaneous charges.	Average cost per patient on miscellaneous charges.
						Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
General Hospital ...	375	281·32	5,495	50,315	56,310	1,64,413 3 7	* 2 14 9	52,027 3 2	0 14 10	207 12 7	0 0 0·7	20,016 4 4	5 8	39,480 0 11	7 3 0	52,681 14 7	0 15 0
Women and Children's Hospital ...	132	131	3,507	...	3,507	61,477 1 6	†17 8 6	28,420 13 3	8 1 8	101 4 6	0 0 5½	3,433 6 7	15 8	19,839 0 5	5 10 6	9,682 8 9	2 12 2
Government Lying-in Hospital	122	109·23	3,440	23,390	26,830	66,352 11 0	2 8 8	23,549 10 4	0 13 5	161 1 0	0 0 1	6,017 9 1	3 7	16,472 0 8	4 12 7	29,152 5 11	0 13 9
Government Ophthalmic Hospital ...	76	56·35	1,703	8,252	9,955	16,873 7 1	1 11 1	7,562 0 0	0 12 2	3 0 2	0 0 0·5	284 7 3	0 5	5,264 6 0	3 1 5	3,759 9 8	0 6 0
Government Leper Hospital	230	218·72	470	58	528	29,424 5 11	55 11 8	8,828 10 2	7 3 9	1 8 0	0 0 0·54	476 7 9	14 5	18,750 12 0	39 14 4	6,372 0 0	12 1 1
Voluntary Venereal Hospital	100	65·75	662	...	662	12,509 4 0	18 14 4	3,960 2 10	5 15 8	8 0 6	0 0 2	555 9 3	13 5	6,264 8 1	9 7 5	1,720 15 4	2 9 7

NOTES.—Column 8—* The average on actual cost was Rs. 2-11-3 after deducting the amount credited to Government, *vide* explanation of column 4 *h* of statement V, part I.
The total includes the salary and compensation allowance of the additional Medical Officer, the salaries of the others, who are Professors in the Medical College, appear in the Medical College statements.
Column 8—† includes the salary and compensation allowance of the Surgeon, Second District.
Column 11—includes only bazaar medicines.
Column 13—includes in the General Hospital medicines purchased locally by the Principal Medical Stores-keeper and the cost of instruments.
Column 17—includes in the General Hospital bedding and clothing Hospital stoppages, Hospital necessaries, Hospital miscellanies, contingencies, buildings and repairs.
In the Hospital for Women and Children it is said to include also some bazaar medicines, Municipal taxes, extra servants and punkah coolies. In the Lying-in Hospital it also includes diploma fees, registers and forms, and stationery. In the Ophthalmic Hospital it also includes conservancy Rs. 168, punkah-pulling, service postage and telegrams and repairs of furniture. In the Leper Hospital it includes most of the above and work bills Rs. 310-8-0, advertisements Rs. 118-14-0, other charges Rs. 425-11-7, miscellaneous receipts remitted to Treasury Rs. 30-5-0. In the Voluntary Venereal Hospital it also includes printing charges from Government Press Rs. 10-10-0.

APPENDIX II.

No. 1.—GOVERNMENT GENERAL HOSPITAL, MADRAS.

ANNUAL REPORT OF THE GOVERNMENT GENERAL HOSPITAL, MADRAS, FOR 1894.

ADMINISTRATION REPORT.

1. ACCOMMODATION.—On the 1st January 1894, the following new wards were opened:—Wenlock and Lansdowne, Dufferin, and Native officers' quarters, giving a total of 64 new beds and making the total accommodation of the hospital 375 beds.

(*a*) *Original works.*—The only new building put up during the year was a coach-house and stall for the Resident Medical Officer at a cost of Rs. 826-5-10. The other 'original works' completed by the Public Works Department and paid for during the year were as follows:—

Two of the surgical sheds were re-roofed with Mangalore tiles and otherwise improved at a cost of Rs. 3,283-8-10.

The old tiled roof of the waiting-room for male patients in the out-patient department having become dangerous was removed, and a terraced roof substituted at a cost of Rs. 1,403-12-8.

The punkahs on the third flat were removed and fitted up in the ground floor wards at a cost of Rs. 583.

The students' and apothecaries' latrines near the gate, which were on a very bad principle and impossible to keep clean, were improved at a cost of Rs. 73-14-10. This has proved to be a very decided improvement.

To ensure privacy, a trellis screen was fixed between the columns in the west verandah of the nurses' quarters at a cost of Rs. 247-13-0.

Designation boards, showing the area and contents of the rooms and the purpose for which the rooms are used, were put up, where found necessary at a cost of Rs. 69.

As the covered drain to the north of the out-patient consulting-room and dispensary could not be kept thoroughly clean, it was opened up and a parapet wall was erected to the north of the drain to prevent accidents at a cost of Rs. 31-12-6.

A punkah was put up in a bed-room of the Resident Medical Officer's quarters at a cost of Rs. 21-5-2.

Water pipes were put down for use in the latrines intended for male and female out-patients at a cost of Rs. 15-15-6.

The total expenditure on 'original works' during the year, as given by the Consulting Architect, amounts to Rs. 6,556-8-4.

(*b*) *Repairs.*—The following repairs were made by the Public Works Department and paid for during the year:—

The whole hospital was repaired and whitewashed at a cost of Rs. 1,644-1-10.

The doors and windows of the hospital were painted at the same time at a cost of Rs. 3,151-13-7.

Bamboo tatties, which serve as walls to contagious sheds, were renewed at a cost of Rs. 483-2-1.

Petty repairs ordered by the Senior Medical Officer were carried out at a cost of Rs. 132-13-8.

Repairs were made to the nurses' and officers' quarters at a cost of Rs. 140-0-2.

The water pump on the second floor was twice repaired at a cost of Rs. 120-0-8.

The ceilings of the fumigating-room in the laundry were replanked at a cost of Rs. 37-6-2.

Some of the rain-water pipes which were worn out were repaired at a cost of Rs. 27-8-0.

Some of the water-taps were repaired at a cost of Rs. 24-6-8.

The expenditure on 'repairs,' as given by the Consulting Architect, amounts to Rs. 5,761-4-10.

(*c*) At present the hospital buildings are in good condition.

(*d*) The ward accommodation, as shown by the proportion of beds to daily average sick, seems to be sufficient.

Number of beds available for	Natives	265	Average daily sick.	Natives	197·11
	Europeans	110		Europeans	84·21
	Total	375		Total	281·32

But practically it is found that occasionally wards become overcrowded and extra beds have to be put in. Great care is taken to try and prevent this overcrowding by distributing the patients to other wards, but even then it cannot always be prevented. In one way it is a good sign, showing as it does how much the treatment in this hospital is appreciated.

2. Attached (as Appendix A) is a form, showing the admissions, average daily sick, deaths, operations, average stay of a patient in hospital and the average cost per diet for in-patients, and also the admissions, average daily sick and operations among out-patients during the last three years. From this it will be seen that the admissions of in-patients both among Natives and Europeans have steadily increased, and the average daily sick is also greater than that of the two preceding years, the average daily sick for 1894 being 17·93 in excess of that for 1892 and 27·77 of that for 1893.

As regards deaths there is a slight decrease among Europeans and an increase among Natives, but the difference is too small to require any special explanation.

The total of the operations performed during 1894 is considerably greater than that of the two preceding years being 670 in excess of those of 1892 and 1,305 in excess of those of 1893. This increase is chiefly among the minor operations, the major operations being actually less by 37 than those performed in 1892 and only 19 more than those in 1893. The increase is chiefly due to the more accurate registration of hypodermic injections and catheterisations.

The average stay of both European and Native in-patients in the hospital during 1894 is considerably less than that of the preceding two years. I am unable to explain the difference.

The average cost per diet per diem of Europeans and of Natives during 1894 is less than that of the preceding two years. This is due to the careful watching of expenditure under this head exercised by the various medical officers.

As regards out-patients the actual admissions among Natives and Europeans have considerably increased, but there is a fall in the average daily sick among males of 28·43, while there is an increase among women and children of 19·78 per day. The cause of this decrease among the average daily sick on the male side has been explained by the Resident Medical Officer in his special report as being due 'to the discouragement of Sunday attendances.'

There is a slight decrease in the number of major operations, but a marked increase in the number of minor operations: the total for 1894 being 3,452, which is an increase of 447 over those for 1893 and 394 over those for 1892.

Attached (as Appendix B) is a form showing the medical work done by each Medical officer during the year 1894.

3. Mortality.—As regards the number of cases admitted in a moribund state or removed in a moribund state, or as regards deaths from septic diseases, all the Medical officers state that such information cannot be given in full for 1894, as the same was not noted down in the Nominal Registers.

The following is the information that has been obtained this year on these heads:—

Senior Physician states: "There is no record to show the actual cases brought in in a moribund condition, but from paragraphs 5 and 6 of the report it is certain that at least 2 Europeans and 8 Natives must be regarded as having been brought in in a moribund condition.

"There is nothing to show how many cases were removed by their friends in a dying condition.

"No deaths from septic diseases."

Assistant Physician states: "In 1894, 23 cases including cholera died within 24 hours after admission. In 1893, 31 moribund cases were admitted to the Assistant Physician's wards including 5 cholera cases.

"The cases removed in a moribund state are not recorded properly. In future, they will be noted down carefully.

"Deaths from septic diseases—*Nil.*"

Additional Medical officer states: "Of the 89 deaths among Natives, 19 were admitted moribund or died within 24 hours of admission."

Senior Surgeon states: "With regard to moribund cases admitted into, or discharged from, hospital, but very few were admitted into the surgical side, and about 8 cases were discharged at their own urgent desire in an exhausted state from various diseases.

"Fuller particulars cannot be given until a Surgical Registrar is appointed."

Second Surgeon states: "Nine Natives and 1 Eurasian were removed by their friends in a dying state.

"Six cases died of pyæmia or septicæmia, in all of which the condition or the cause of it existed before admission."

"One patient died in the out-patient room of "aortic incompetence probably in an attack of suffocation due to angina pectoris."

4. Operations.—The following statement shows the number of major operations performed by each Medical officer during the year 1894:—

Names of officers who have performed major operations.	Number.	Period the officer was present for duty	
		From	To
Surgeon-Lt.-Colonel W. R. Browne, M.D. ...	195	1st January	5th September.
		1st October	31st December.
Surgeon-Lt.-Colonel H. Allison, M.D.	17	6th September	30th September.
Surgeon-Major J. Maitland, M.D.	166	1st January	5th July.
Surgeon-Captain F. J. Crawford, M.D.	259	1st January	15th August.
		14th September	31st December.
Surgeon-Captain D. Simpson, M.B.	7	1st January	19th March.
Surgeon-Captain R. Robertson	4	3rd July	31st December.
Surgeon-Captain A. E. Grant, M.B.	2	1st January	9th June.
Surgeon-Captain C. L. Williams, M.D.	166	1st January	31st December.
Surgeon-Captain G. G. Giffard	9	12th April	31st December.
Dr. Innes	1	1st January	24th February.
Civil Apothecary M. C. Koman	27	1st January	16th January.
		17th March	31st December.
Civil Apothecary C. Dastagheer Khan ...	1	26th August	31st December.
Civil Apothecary T. Ekambaram Pillay ...	12	1st January	25th December.
Civil Apothecary C. M. Thirumudisami ...	45	1st January	31st December.
Total ...	911		

The 85 major operations performed by Medical subordinates include two cases of paracentesis thoracis and 83 cases of paracentesis abdominis.

5. Establishment.—(*a*) *Medical Staff.*—The following statement gives the names of the Medical officers attached to the hospital during 1894 showing their rank, the nature of their duty and the period during which they were on duty:—

Rank.	Name.	Nature of their duties.	Period during which the officers were present for duty		Remarks.
			From	To	
Brig.-Surg.-Lt.-Col.	W. Price, M.D. ...	Senior Physician and Senior Medical officer.	6th July ...	31st Dec. ...	On furlough till 6th July.
Surg.-Lt.-Colonel ...	W. R. Browne, M.D.	Senior Surgeon ...	6th July ...	31st Dec. ...	Acted as Senior Physician and Senior Medical officer till 6th July; on privilege leave from 5th to 30th September.
Surgeon-Major ...	J. Maitland, M.D. ...	Acting Senior Surgeon.	1st January.	5th July.	
Surgeon-Major ...	J. Smyth, M.D. ...	Resident Medical officer.	...	...	On furlough.
Surgeon-Captain ...	C. L. Williams, M.D.	Acting Resident Medical officer.	1st January.	31st Dec. ...	Also acted as Additional Medical officer from 19th March to 12th April and as Second Surgeon from 16th August to 14th September.
Surgeon-Captain ...	F. J. Crawford, M.D.	Second Surgeon ...	1st January.	31st Dec. ...	On privilege leave from 16th August to 14th September.
Surgeon-Captain ...	A. E. Grant, M.B. ...	Assistant Physician ...	1st January.	9th June. ...	On furlough from 9th June.
Surgeon-Captain ...	R. Robertson ...	Acting Assistant Physician.	3rd July ...	31st Dec. ...	
Surgeon-Captain ...	D. Simpson, M.B. ...	Acting Additional Medical officer.	1st January.	19th March.	On leave on medical certificate.
Surgeon-Captain ...	G. G. Giffard ...	Acting Additional Medical officer.	12th April.	31st Dec. ...	Also acted as Assistant Physician from 9th June to 3rd July.

Surgeon-Lieut.-Colonel H. Allison, M.D., acted as Senior-Surgeon from 5th to 30th September 1894 during the absence of Surgeon-Lieut.-Colonel W. R. Browne, M.D., on privilege leave.

Dr. Innes of the Travancore State did duty in this hospital from 1st January to 24th February 1894.

Dental Surgeon C. F. Badcock assumed charge of his duties in this hospital on the 15th November 1894.

(*b*) *Medical Subordinates.*—One Military Assistant Surgeon, six Civil Apothecaries and three Hospital Assistants are attached to the hospital. The Assistant Surgeon is in charge of the Medical Stores and the female side of the out-patient department. The six Apothecaries are attached to the six Medical officers. Of the three Hospital Assistants, one is in charge of the out-patient dispensary and the other two of In dispensary.

(*c*) *Nursing Department.*—The nursing staff consists of one Matron Superintendent, one head nurse, one assistant head nurse, four first-grade nurses, twelve second-grade nurses, six pupil nurses and forty-three male ward attendants. When found necessary by the Medical officer in charge extra ward attendants are appointed for cases which require special nursing.

As to the training of nurses, instructions were given to the pupil nurses by the Assistant Surgeon and Matron Superintendent. The pupil nurses were also examined monthly by the Resident Medical officer on the subjects taught by the Assistant Surgeon and Matron Superintendent. None of the pupil nurses remained long enough to receive diploma, though eight were instructed during the year.

The rules regulating the admission of pupil nurses to the examination for the Diploma of General Sick Nurse may be summarised as follows:—

After one year's training a nurse pupil becomes eligible for admission to this examination. The training which is accompanied by systematic class instruction by the Senior Assistant Surgeon and Matron Superintendent as stated above includes instruction in bandaging, splints, general surgical nursing, general medical nursing, anatomy so far as is necessary, nature of wounds, general and personal hygiene, sick dietary and cooking for the sick. Nurse pupils have also to make themselves thoroughly acquainted with the hospital rules so far as they bear on the duties of nurses.

Male ward attendants under one year's service are instructed twice a week by the Assistant Surgeon, while those between one and five years' service are instructed once a week. During the year three of the former were under instruction and eleven of the latter. These men have no examination.

(*d*) *Steward's Department.*—This department consists of one head steward, two assistant stewards and one kitchen steward. There are also two clerks, who assist in the scriptorial work of the department. The introduction of the store and tender system has thrown a great increase of work on this department, and necessitated the appointment of a kitchen steward and a clerk on 30th November 1893. The kitchen steward takes the duties formerly attended to by the head steward in the kitchen and also in going round with the diets, while the clerk assists in the office. This assistance was found to be absolutely necessary to give the stewards time to check the storekeeper's expenditure and returns. Even this help was however found to be insufficient, and on 22nd October 1894 a copyist had to be appointed.

With all this help, however, the stewards still complain bitterly of overwork. As compared with the work done in other offices, they have, no doubt, cause of complaint. To begin with, the hours of attendance are very long, from 6–30 A.M. to 6 P.M., and also night duty once in six nights. Then, in common with the medical staff, they get no holidays, having to work on Sundays and all other Government holidays. What this means only those who have actually tried it can realize.

(*e*) *Storekeeper's Department.*—This department consists of one storekeeper, one weighman and one store cooly. This establishment is insufficient for the proper carrying on of the work, but, as the whole matter is at present under the consideration of a special Diet Committee, it seems to me unnecessary to go into further particulars at present.

(*f*) *Linen Department.*—This department consists of one linenkeeper, two tailors and six dhobies. The expenditure on 'bedding and clothing' during 1894 amounts to Rs. 5,085–14–2 against Rs. 5,070–6–10 in 1893.

(*g*) *Sanitary Department.*—This department consists of one sergeant, one boatswain, sixteen bearers, four lascars, four gardeners, three bathmen, five sweepers, eighteen toties and one bricklayer.

The above is the permanent sanctioned establishment, but in order to cope with the great increase in the work, it has been found necessary to appoint extra toties and lascars who do not come on the permanent establishment. The appointment of these men is sanctioned monthly by the Surgeon-General.

A carpenter is also kept on the establishment and his time is fully occupied in petty repairs, making splints, crutches, &c.

The bricklayer attends to petty repairs, white-washing of latrines and other parts of the hospital. His time is fully occupied.

As regards repair of furniture, I have found it much more satisfactory and cheaper to pay a painter by the month rather than get a large estimate occasionally. This man's time is fully occupied in painting bath tubs, scraping, cleaning, varnishing and painting furniture.

(*h*) It seems to me that a short account of the way in which the sullage water of the hospital is disposed of may be suitably given here.

When I took charge of the General Hospital in 1891, I found all the sullage water running into our famous Cooum, a part of which 'river' stagnates to the west and south of the compound. This was evidently wrong and I began to think how it could be remedied. The then Resident Medical Officer, Surgeon-Captain J. Smyth, told me he had tried to remedy it

by digging a 'weeping drain' along the side of the Cooum to water some cocoanut trees, &c., but the stench became so great he had to put a stop to it. Having had some experience in the working of the Ráyapuram sewage farm, I at once saw the mistake he had made, viz., trying to get good results from stagnant water, instead of utilizing it while in motion. I dug a small well near the main drain, had it lined with brick and cement, erected a picottah, made my channels, prepared the ground, blocked the main drain, planted harially roots, and irrigated. The consequence is that where there was formerly an ugly bare waste of brick and rubbish with two sickly cocoanut trees, which had never borne fruit, there is now a meadow of beautiful green grass; the two cocoanut trees have burst out with fruit for the first time (they had been planted in 1876 by the Sergeant-Major); there are also 61 flourishing young cocoanut trees and 250 other trees—Portias, casuarina and neems chiefly. Portias and neems planted themselves; in fact at one time there were over three hundred such, but I had to thin them out.

Another and a very important consequence is the immense improvement that has taken place in the condition of the Cooum around the hospital. During this hot weather, while the Cooum was stinking horribly near the Government house bridge, there was no smell from it round the hospital, though it was very strong to the north of the hospital bridge, where the sullage from John Pereira, &c., enters it.

The hospital compound contains five acres, and, since I began this work in July 1892, I find I have cut the following amounts of really good harially grass such as is fit to turn into hay. No one, who has seen nothing but the ordinary starved harially, could recognize it. There is as much difference between the two as between a famine-stricken and a well-fed cooly:—

1892	.. ..	*Nil.*
1893	.. ..	lbs. 50,240
1894	.. ..	,, 53,031

I have not sufficient sullage water to irrigate all the compound, and have consequently to use Red Hills and well water for some portion of it. There is a very great improvement in the amount and quality of the grass obtained from the sullage water as compared to the well; the harially seems to revel in the sullage water.

A most important point to attend to in the use of sullage water, in order that it may be used so as not to form a nuisance, is to see that it does not stagnate anywhere, and that it is carried as far as possible in raised drains. If permitted to stagnate, it is certain to putrefy and stink.

There is another very interesting point with reference to the formation of this sullage grass plot. Before 1891 it had been the custom to bury all the excreta from cholera patients in one particular part of the compound. This had been going on for many years—certainly over twenty. The soil in this particular part was sandy and for the most part barren. Notwithstanding the great faith I have in the disinfecting powers of earth, it was with considerable anxiety that I had this laid out, more especially as I found that large useless iron receptacles and other rubbish had also been buried here, in the removing of which it was necessary to disturb the soil to a considerable depth. However, it was done without accident, and now that the ground is covered with a strong growth of harially grass all danger may, I think, be considered to be past.

Since writing the above, I have had practical experience of the benefit of my system.

On arrival at hospital this morning, I found the lower part of the hospital filled with the sickening loathsome smell of sewer gas. On seeking the cause, I found the foul air came from a grating over a municipal drain outside the north wall of the hospital. This drain—a covered one—crosses the road to the corner of Wall Tax Road, and then under the railway compound until it empties itself into the Cooum to the north of the hospital bridge. I found that the present land wind strikes almost fair on the mouth of this drain, passing over the seething mass of filth that has collected there, blows up the drain and at last finds vent laden with mephitic vapours at the above-mentioned grating, and thence into the hospital. If what I have done at the outlet of the hospital drain were done at the outlet of this, all this nuisance would be avoided and the present filthy collections changed into good clean useful grass and hay.

The state of the hospital this morning shows one of the many dangers of covered drains and how a building, whose own surroundings are kept in a sanitary state, may be injured, through a covered drain, by filth at a distance.

6. FINANCE—(*a*) *Income.*—The total income for the year 1894 was Rs. 1,65,238. This was all received from Government with the exception of a sum of Rs. 12,075, which was made up of Rs. 11,463 received from paying patients, of Rs. 222 received as fines from contractors, and Rs. 389 from sale of grass, hay and wood from compound. Of the sum received from paying patients by far the greater amount, viz., Rs. 8,826 was received from patients in the officers' quarters, while of the remainder received from patients in the general wards, Rs. 2,500 was paid by Europeans and Eurasians, while only Rs. 137 was paid by Natives. The small amount received from Natives in the general wards is due partly to the poverty of those treated (according to G.O., dated 13th October 1894, No. 770, Public, no stoppage is made from any patient drawing less than Rs. 12 per month), and also to the impossibility of finding out the true income of others.

Of the amount received from patients in officers' quarters, Rs. 3,992 was paid by Government servants and Rs. 4,834 by private individuals. I would point out that the rates laid down in G.O.s, No. 762, dated 8th July 1875, and G.O., No. 285, dated 1st March 1879, were intended to cover expenses incurred in the treatment of Government servants who are entitled to free medical attendance outside, and that consequently they are not suitable rates for private individuals. Take the case of a typhoid patient paying Rs. 2 or even Rs. 5 a day with two nurses in constant attendance. This rate at present charged does not cover the nursing, not to mention medical attendance, diet, stimulants, &c. I would recommend that the rates in officers' quarters for private individuals should be double those for Government servants. These rates would probably prevent some of the less serious cases seeking admission, but this would be a decided advantage and would help to do away with the very just cause of complaint that Medical officers have when they see men who ought to be patients of theirs coming in here for practically free treatment, for it must be looked upon as such as long as the hospital charges do not equal those of a hotel. This cause of complaint has been much accentuated since the house-rent of Medical officers has been stopped on the ground of their being able to engage in private practice. The proposed rates would in no wise prevent really serious cases being brought to hospital, and any case unable to pay for medical attendance outside, or these rates in the officers' quarters inside, could always go to the general wards. It is to what they consider the abuse of the officers' quarters wards that Medical officers object so strongly.

It will be seen that the Government Order stops at Rs. 5 per day for patients drawing Rs. 500 and upwards; it was probably supposed that patients drawing over Rs. 600 would seldom or never apply. This however is not now the case. I would suggest that those drawing over Rs. 600 a month should pay a rupee for every hundred over that amount.

To statement V, part I, I have attached another statement giving further details regarding the various heads under which income was received from Government. This statement seems to me so plain as not to require any written explanation beyond stating that all the commissioned medical staff, with the exception of the additional Medical officer, being also Professors in the Medical College the whole of their pay is debited against the college and not against the hospital. The full explanation given under '*Expenditure*' is also applicable to '*Income*.'

(*b*) *Expenditure.*—Attached as appendix C I submit a form drawn out on statement V, part I, showing the expenditure for 1894 as compared with that for 1893.

The differences between the two years are explained as follows:—

Medical Officers.—Here there is an excess of expenditure during 1894 of Rs. 4,544 over that of 1893. This is due—

(1) to the additional Medical officer having been paid twelve months in 1894 as against six months in 1893;
(2) to the increase to salaries of Civil Apothecaries D'Prazer, Phillipz, Parrie and Koman (after their promotion examination) for six months in 1894;
(3) to the sick leave allowance drawn in 1894 for late Hospital Assistant C. Singaravalu Moodaliar.

Compounders, Dressers, &c.—Here there is an excess of expenditure during 1894 of Rs. 3,590 over that of 1893. This is due—

(1) to exchange compensation allowance paid to the Matron Superintendent for twelve months in 1894 as against ten months in 1893;
(2) to extra nurses sanctioned for the new wards on the third storey;
(3) to pay of one kitchen steward;
(4) to pay of three extra writers (one to Assistant Surgeon and two to Steward's department).

Menial Servants.—Here there is an excess of expenditure during 1894 of Rs. 1,433 over that of 1893. This is due—

(1) to extra ward attendants
(2) to extra cook and mussalchee
(3) to extra bearers, toties and sweeper
} Sanctioned for the new ward in third storey.

Bazaar Medicines.—Here there is a decrease of expenditure during 1894 of Rs. 242 when compared with 1893. This is due to European medicines purchased locally and supplied by the Principal Medical Storekeeper having been debited to European medicines. A sum of Rs. 138 was by a mistake included in bazaar medicines in 1893.

European Medicines.—Here there is a decrease in expenditure of Rs. 3,417 in 1894 as compared with 1893.

On Diet.—Here there is an increase in expenditure of Rs. 1,974 in 1894 as compared with 1893. This is due to a larger number of patients dieted in 1894 owing to 56 extra beds provided in the new wards and eight in the native officers' quarters opened on the third storey.

Miscellaneous Charges.—Here there is an increase in expenditure of Rs. 2,483 in 1894 as compared with 1893. This is due—

(1) to cost of registers, forms, &c., not having been shown in 1893;
(2) to furniture for the new native officers' quarters on the third storey during 1894.

On Buildings or Repairs.—Here there is a decrease in expenditure of Rs. 18,675 in 1894 as compared with 1893. This is due to no large original works or repairs having been executed by the Public Works Department in 1894.

Hospital Stoppages, &c.—Here there is an increase of Rs. 1,369 in 1894 as compared with 1893. This is due to a greater number of paying patients.

Average Cost of each diet.—The average for 1894 is lower than that for 1893. This is due to the care exercised by the Medical officers in keeping down the cost of their diets.

Note.—The above explanation for the *Expenditure* is also applicable to the *Income*.

Attached as appendix D I submit a form drawn out on Civil Medical Form V, showing the expenditure for 1894 as compared with that for 1893. From this it will be seen that there were 64 more beds available in 1894 than in 1893, that the daily average number of beds occupied during 1894 had increased by 27·77, that the total number of in-patients treated had increased by 2,005, that total number of out-patients treated had also increased by 1,194, and that the total number of patients treated had increased by 3,199.

Notwithstanding this increase in beds and in-patients treated, it will be seen that the total expenditure has decreased by Rs. 6,941.

The average cost per patient has also diminished under all heads with the exception of that under 'Establishment.'

The average cost per patient on total cost being for 1894 Rs. 2-14-11½, which is less than that for 1893 by Rs. 0-4-11. The decrease of the average cost per in-patient on diets, amounting to Rs. 3-8-11¾, is especially satisfactory and must be put down to the care taken by Medical officers in the ordering of extras, &c.

The following is a comparative statement showing average cost per patient for European and native in officers' quarters and general wards respectively during the years 1893 and 1894:—

—	European		Native	
	Officers' quarters.	General wards.	Officers' quarters.	General wards.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	A. P.
1893	1 2 6¼	0 7 11½	*Nil.*	4 0½
1894	1 1 8¾	0 7 8¼	0 13 8¼	3 9¼

From this it will be seen that the cost for 1894 in all cases was less than that for 1893, and both for Europeans and natives well within the average laid down in G.O., No. 1, Public, dated 1st January 1889.

During 1894 there were 26,570 'self diets' in the native wards, giving an average of 7·38 'self diet' per day. There are no figures to show the actual number of patients who were permitted to obtain diet from their own homes.

(*c*) As the tender system is at present being laboriously considered by a special Diet Committee, it seems to me unnecessary to make any remarks on it here.

7. Poor Fund.—This is entirely a private thing, supported by voluntary contributions and kept under the care of the Matron Superintendent. Its funds are devoted to the helping of poor patients with railway tickets, wooden legs, catheters, tracheotomy tubes, &c.

8. Stock-taking of Government Property.—Government property is well looked after and all repairs to furniture are attended to. Stock was last taken in June 1894 and posted into the Stock ledger.

9. All the service books have been carefully verified up to 31st March 1895.

10. The special professional reports were sent in with this office letter No. 281, dated 21st March 1895.

(Signed) W. PRICE, M.D., Brigade-Surgeon-Lieut.-Colonel,
Senior Medical Officer.

General Hospital,
Madras, 14*th May* 1895.

APPENDIX A.

Comparative statement of the Medical Work done in General Hospital for the last three years.

Year.	In-patients.														Out-patients.								
	Admissions.		Average daily sick.		Deaths.			Operations.			Average stay in hospital.		Average cost of diet.				Admissions.			Average daily sick.			Operations.		
													General wards.		Officers' quarters.										
	Europeans and Eurasians.	Natives.	Europeans and Eurasians.	Natives.	Europeans and Eurasians.	Natives.	Total.	Major.	Minor.	Total.	Europeans and Eurasians.	Natives.	Europeans and Eurasians.	Natives.	Europeans and Eurasians.	Natives.	Europeans and Eurasians.	Natives.	Total.	Male side.	Female side.	Total.	Major.	Minor.	Total.
													Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.									
1892	1,273	3,077	81·41	181·98	74	316	390	861	4,348	5,209	23·3	21·5	0 7 5½	0 3 10½	1 2 7½	...	7,959	37,007	44,966	212·58	119·09	331·67	103	2,955	3,058
1893	1,329	3,161	80·43	173·12	62	246	308	805	3,769	4,574	22·0	19·9	0 7 11½	0 4 0½	1 2 6½	...	8,171	41,450	49,621	214·00	137·46	351·46	95	2,910	3,005
1894	1,548	3,947	84·21	197·11	57	309	366	824	5,055	5,879	13·13	12·3	0 7 3½	0 3 9½	1 1 8½	0 13 8½	8,465	42,350	50,815	185·57	157·24	342·81	87	3,365	3,452

APPENDIX B.

Statement showing the Medical Work done by each Medical Officer during the year 1894.

Medical Officers.	Class of Patients.	In-patients. Admissions. Remained.	Admitted.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining.	Average daily sick.	Death-rate per 1,000.	Operations. Major. Remained.	Performed during the year.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining.	Minor.	Average stay of a patient in hospital.	Average cost of diet. Officers' quarters.	General wards.	Post-mortem examination.
Senior Physician ...	Natives	...	360	360	124	115	76	38	7	16·11	105·55	...	42	42	...	42	...	...	...	233	11·06	Rs. A. P. 0 9 0	Rs. A. P. 0 3 7	21
	Europeans	...	343	343	182	98	36	16	11	15·09	46·65	...	...	...	...	...	...	...	...	301	10·89	1 0 4¾	0 7 ¾	2
	Total ...	...	703	703	306	213	112	54	18	31·20	76·81	...	42	42	...	42	...	...	...	534	10·97	...	...	23
Assistant Physician.	Natives	42	783	825	344	175	200	73	33	38·24	88·48	...	32	32	...	32	...	...	...	28	11·75	0 14 5½	0 4 2½	19
	Europeans	20	365	385	239	70	54	8	14	18·57	20·78	...	1	1	...	1	...	...	...	65	11·81	1 3 2½	0 7 5	...
	Total ...	62	1,148	1,210	583	245	254	81	47	56·81	66·94	...	33	33	...	33	...	...	...	93	11·77	...	...	19
Additional Medical officer.	Natives	31	992	1,023	359	260	286	89	50	46·59	87·00	...	28	28	...	28	...	...	...	59	11·59	0 11 9½	0 3 10½	30
	Europeans	25	350	375	184	106	54	16	15	17·58	42·67	...	30	30	...	30	...	...	...	60	11·44	1 1 ¼	0 7 3	4
	Total ...	56	1,342	1,398	522	366	340	105	65	64·17	75·11	...	58	58	...	58	...	...	...	119	11·51	...	...	34
Senior Surgeon ...	Natives	51	792	843	410	250	85	58	40	48·13	68·80	17	304	321	187	64	15	34	21	1,295	12·96	0 12 10½	0 3 7	12
	Europeans	13	227	240	132	55	26	11	16	17·93	45·83	3	56	59	47	2	1	5	4	517	16·42	1 0 5¼	0 7 4½	3
	Total ...	64	1,019	1,083	542	305	111	69	56	66·06	63·71	20	360	380	234	66	16	39	25	1,812	14·69	...	...	15
Second Surgeon ...	Natives	38	858	896	456	218	126	51	45	48·04	56·92	15	283	298	196	33	18	32	19	2,092	12·83	0 8 10	0 3 4	16
	Europeans	16	189	205	133	48	10	6	8	15·04	29·27	6	48	54	43	4	1	4	2	405	15·10	1 3 2¾	0 7 2½	1
	Total ...	54	1,047	1,101	589	266	136	57	53	63·08	51·77	21	331	352	239	37	19	36	21	2,497	13·96	...	...	17
Total ...	Natives	162	3,785	3,947	1,672	1,018	773	309	175	197·11	80·06	32	689	721	383	199	33	66	40	3,707	12·03	0 13 8¾	0 3 9½	98
	Europeans	74	1,474	1,548	870	377	180	57	64	84·21	36·82	9	135	144	90	37	2	9	6	1,348	13·13	1 1 8¾	0 7 3½	10
	Grand Total ...	236	5,259	5,495	2,542	1,395	953	366	239	281·32	66·61	41	824	865	473	236	35	75	46	5,055	12·58	...	...	108*

Medical Officers.	Class of Patients.	Out-patients. Total treated. Men.	Women.	Children.	Total.	Average daily sick. Men.	Women.	Children.	Total.	Operations. Major.	Minor.	Total.
Resident Medical Officer and Assistant Surgeon	Natives	23,659	7,767	10,924	42,350	161·99	57·88	73·40	293·27	79	3,131	3,210
	Europeans	3,923	1,848	2,694	8,465	23·58	9·97	15·99	49·54	8	234	242
	Total ...	27,582	9,615	13,618	50,815	185·57	67·85	89·39	342·81	87	3,365	3,452

* 1 died in out-patient room, thus bringing the total of *Post-mortem* examination to 109.

APPENDIX C.

STATEMENT V.—PART I.

Showing the current Income and Expenditure of the Dispensary in 1894 as compared with that of 1893.

1	2	3	4	5	6	7
Number.	Name of dispensary.	Income.	Expenditure.	Cash balance on 1st January 189 .	Cash balance in hand on 31st December 189 .	Percentage of total cost paid by Government.
(General Hospital, Madras. 1894. 1893.		A	a On Establishment.	... ...	... ...	100 per cent. 100 per cent.
1		B From Government	As salaries. Medical officer.*	18,381 10,771 3,066	0-6-1¼ 0-6-5¾	Average cost of each diet.
				18,381 13,837		
			Inferior dispensary establishment (including menial servants).† Compounders, dressers, &c.	23,169 19,579		
				10,476 9,043		
			Menial servants.			
			As registers and forms.	969 ...		
			As European medicines.	20,016 828 24,256		
			For diet, including police cases.	39,480 37,606		
			Sale of medicines supplied by Government.	... ...		
			Special allowances given by Government.	39,844 57,246		
			Total.	1,53,158 1,61,467		
		C From Local or other funds	Local funds.	... ...		
			Municipal Funds.	... ...		
		D	Interest on investments.	... ...		
		E	Sale of securities or withdrawal of deposits.	... ...		
		F Subscriptions.	From Europeans.	... ...		
			From Natives.	... ...		
		G	For diet (by paying patients, &c.).	11,468 10,209		
		H	From sale of medicines not supplied by Government.	... ...		
		I	Miscellaneous receipts.	611 497		
		J	Total income.	1,65,232 1,72,173		
			Total expenditure during the year.	1,65,232 1,72,173		
			Invested during the year.	12,075 10,706		
			On buildings or repairs.	12,317 30,992		
			On miscellaneous charges (including registers, &c., supplied by Government).	28,288 25,805		
			On diet.	39,480 37,506		
			On European medicines.	20,016 828 24,256		
			On bazaar medicines.	307 449		
			Inferior Dispensary establishment (including menial servants).† Menial servants.	... ...		
			Compounders, dressers, &c.	... ...		
			Medical officers.*	... ...		
			As Salaries. Inferior Dispensary establishment (including menial servants).† Menial servants.	10,476 9,043		
			Compounders, dressers, &c.	23,169 19,579		
			Medical officers.*	18,381 13,837		
			Paid by Government. As Salaries. Medical officers.*	18,381 13,837		
			Paid from Local Sources. On Salaries. Inferior Dispensary establishment (including menial servants).† Menial servants.	... ...		
			Compounders, dressers, &c.	... ...		
			Medical officers.*	... ...		

* In this column should be shown (1) the pay of Surgeons, Assistant Surgeons, Apothecaries, Hospital Assistants and Native doctors *attached* to the Dispensary, including special dispensary allowance (if any), and (2) the special dispensary allowance given to Surgeons, Assistant Surgeons, Apothecaries, Hospital Assistants and Native Doctors for holding charge of the dispensary in addition to their ordinary civil work. The *pay* of Civil Surgeons or other Medical officers holding charge of the dispensary in addition to other duties should not be shown at all in this statement.

† In this column should be shown the salaries of (1) compounders, dressers, nurses (if any), &c., (2) menial servants, *e.g.*, cooks, sweepers, chankidars, &c.

APPENDIX D.

CIVIL MEDICAL FORM V.

Cost per Patient treated during the year 1894 *as compared with that of* 1893.

1	2	3	4	5	6	7	8	9	10
Name and class of institution whether hospital or dispensary.	Number of beds available.	Daily average number of beds occupied.	Total number of in-patients treated.	Total number of out-patients treated.	Total of both in- and out-patients treated.	Total cost.	Average cost per patient on total cost.	Total cost on establishment.	Average cost per patient treated on establishment.
						RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
General Hospital, Madras. 1893.	311	253·55	3,490	49,621	53,111	1,72,173 0 0	3 3 10½ 3 0 7¾	42,459 0 0	0 12 9½
1894.	375	281·32	5,495	50,815	56,310	1,65,232 0 0	2 14 11½ 2 11 6½	52,027 3 2	0 14 9½

—	11	12	13	14	15	16	17	18
Name and class of institution whether hospital or dispensary.	Total cost of bazaar medicines.	Average cost per patient treated on bazaar medicines.	Total cost of European medicines.	Average cost per patient on European medicines.	Total cost of diets.	Average cost per in-patient on diet.	Total cost of miscellaneous charges.	Average cost per patient on miscellaneous charges.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
General Hospital, Madras. 1893.	449 0 0	0 0 1¾	24,256 0 0	0 7 3¾	37,506 0 0	10 11 11¼	56,796 0 0	1 1 1¼
1894.	207 12 7	0 0 0¾	20,839 0 0	0 5 11¼	32,480 0 11	7 2 11¼	39,636 14 8	0 11 6½

PROFESSIONAL REPORT.

SENIOR PHYSICIAN.

THE total number of patients treated in the Senior Physician's wards during the year 1894 (Surgeon-Lieutenant-Colonel W. R. Browne, M.D., being in charge from 1st January to 6th July and Brigade-Surgeon-Lieutenant-Colonel W. Price, M.D., for the remainder of the year) was 703, of whom 343 were Europeans and Eurasians and 360 Natives against 417 and 556 in the preceding year.

2. Table showing the total number of patients treated from 1892 to 1894 inclusive :—

Class.	1892.	1893.	1894.
Europeans	379	417	343
Natives	428	556	360
Total ...	807	973	703

3. There is a decrease of 74 Europeans and 196 Native patients as compared with the figures of the previous year. In explanation of this decrease, I have to state that separate wards were not given to the Additional Medical officer in 1893, but that he was assisting the Senior Physician in his wards with some additional beds added on. On the 1st January 1894 special wards were handed over to the Additional Medical officer, who sends in a separate report for the first time this year.

4. Of the 343 Europeans admitted, 182 were cured, 98 relieved, 16 died, 36 were discharged otherwise, and 11 remained at the end of the year.

5. Of the 360 Natives admitted, 124 were cured, 115 relieved, 38 died, 76 were discharged otherwise and 7 remained at the end of the year.

	Europeans.	Natives.
6. Remained	*Nil.*	*Nil.*
Admitted	343	360
Total ..	343	360
Cured ..	182	124
Relieved ..	98	115
Died	16	38
Discharged otherwise ..	36	76
Remaining ..	11	7
Total ..	343	360

NOTE.—There were no cases "remaining" in my wards at the beginning of the year, as the patients were handed over with the special wards to the Additional Medical officer.
"Discharged otherwise" includes 'absconded,' 'discharged for misconduct,' 'at own request,' 'unfit for operation,' 'incurable,' &c.

7. The total number of deaths was 54 against 64 of the previous year; 16 Europeans and 38 Natives giving a percentage, on total treated, of 4·65 and 10·55 deaths respectively.

8. The greatest number of deaths from any one disease resulted from cirrhosis of the liver and its complications.

9. The principal causes of death as seen from the statement below among the Europeans were—

Under Surgeon-Lieut.-Colonel Browne.

Disease.	Number of days in hospital.
Peritonitis	4
Enteritis	4
Dysentery	19
Do. (acute)	4
Do.	61
Enteric fever	3
Do.	3
Chronic diarrhœa	6
Chronic Bright's disease	4
Do.	68
Cerebral hæmorrhage	5

Under Brigade-Surgeon-Lieut.-Colonel Price.

Disease.	Number of days in hospital.
Chronic Bright's disease	1
Alcoholism, acute	1
Aneurism of heart	2
Valvular disease of heart	66
Do.	5

10. From the above statement, which also gives the number of days in hospital of each fatal case, it will be seen that many of the fatal cases were brought in in a dying state. The case of acute alcoholism having been admitted at 9 P.M. on 28th November and dying at 12–45 the same night; one case of chronic Bright's disease was admitted at 9 A.M. one day and died at 3 P.M. on the same day. Of the dysentery cases, two were chronic; the one who died four days after admission was a Japanese High Priest who was admitted from boardship on the 22nd of January and died on the 25th of same month from exhaustion; his case was evidently hopeless when first seen. The cases of valvular disease of heart were admitted in the last stage of ruptured compensation. The aneurism of the heart was admitted at 1 P.M. on the 24th October suffering from hemiplegia of five months' duration, and died suddenly at 4–45 P.M. the next day from rupture of an aneurism of heart (found *post-mortem*).

11. The following is a similar statement regarding the deaths among Natives :—

Under Surgeon-Lieut.-Colonel Browne.

Disease.	Number of days in hospital.
Cirrhosis of the liver	4
Do.	11
Do.	62
Do.	30
Do.	3
Ague	15
Pneumonia	5
Do.	4
Do.	17
Valvular disease of heart	3
Pericarditis	8
Malarial cachexia	3
Do.	3
Asthma	4
Do.	13
General debility	91
Chronic Bright's disease	5
Do.	41
Do.	1
Pulmonary tuberculosis	15
Do.	10
Dysentery	27
Fever	1
Ulceration of pharynx	1

Under Brigade-Surgeon-Lieut.-Colonel Price.

Disease.	Number of days in hospital.
Cirrhosis of the liver	5
Anæmia	17
Ague	1
Valvular disease of heart	21
Malarial cachexia	30
Do.	1
Pulmonary tuberculosis	15
Do.	10
Dysentery	4
Do.	18
Chronic diarrhœa	11
Corrosive sublimate poisoning ..	1
Cancer of stomach	1
Gastric ulcer	1

12. The case shown as having died from ague after one day's illness is remarkable. This man was admitted into the Senior Surgeon's ward on the 25th November suffering from multiple injuries; when almost well of the injuries he was suddenly attacked, at 6 A.M., on the 22nd December, with ague followed by a rise of temperature to 105°, and died unexpectedly at 10–45 A.M. on the same day from syncope. "He wanted to get on the night stool, as soon as he got up, he fell down and died."

The following are the remarks of the Acting Resident Medical officer, Surgeon-Captain Williams, extracted from the *Post-mortem* Register :—

"*Remarks.*—This man was admitted on 25th November for multiple injuries. Stabs in the places noted above. These had practically healed and the man was to all intents and purposes well and was awaiting his discharge; when he suddenly had a rigor followed by high temperature and died within 24 hours. There was absolutely nothing in the wounds to account for this, and in the absence of other cause it had to be debited to malaria acting by inducing syncope in a fatty heart."

Actually this patient was not in my wards at all, but as he is said to have died from 'ague,' he was transferred in the books to Medical wards.

13. One case of malarial cachexia was admitted on the 23rd October and died next day. The following remarks are taken from the *Post-mortem* Register :—

"*Remarks.*—Admitted speechless and died without giving any history of himself with a normal axillary temperature, but a rectal one of 101°.

"Death from syncope.

"The only noticeable appearance was the large and soft spleen, that of an acute fever, and it is probable he died of exhaustion with coma after a severe attack of malarial fever."

14. One chronic Bright's disease case was admitted in a dying state on 7th June and died next day at 5–45 P.M.

15. One case of ulceration of pharynx was admitted on the 25th June and died a little after midnight. The following remarks are taken from the *Post-mortem* Register :—

"*Remarks.*—This man was admitted on the morning of the 25th with dyspnœa. He had had fever for 2 years and for 10 days dyspnœa with hæmoptysis 4 days; no history of syphilis or traumatism. His dyspnœa increased so rapidly that I had to do tracheotomy at midnight, *i.e.*, 16 hours after admission. He was then in a high fever and moribund. He had not strength to avail himself of the freer current of air and died practically unrelieved. Death, however, was due to syncope and not asphyxia which was just averted. His fever was, doubtless, septicœmic."

16. One case of fever admitted on the 17th June, died the same night. The following are the remarks from *Post-mortem* Register:—

"*Remarks.*—This man came in with fever of some days' duration and died before a diagnosis could be made of the variety of the fever."

17. One case cancer of stomach admitted, 23rd October, in a dying state, died next day.

18. One case was admitted on 14th December in a dying condition from acute peritonitis, said to have been of four days' duration and died at 7-30 A.M. next day. *Post-mortem* examination showed that the cause of the peritonitis was perforation of a gastric ulcer.

19. The case of corrosive poisoning was admitted on the 24th August at 1-15 A.M., and died next day at 8-45 A.M. The following are remarks from the *Post-mortem* Register:—

"*Remarks.*—This was a case of accidental poisoning. The boy lived in the house of a native doctor and took a large dose of H_6 Cl_2 in mistake for sugar. This was followed by early copious vomiting which was later replaced by free diarrhœa. Complaint chiefly burning in the throat. Death from collapse about 22 hours after taking the poison."

20. The principal diseases treated during the year were:—

Among Europeans.—Dysentery, malarial fever, diseases of the respiratory system, &c.
Among Natives.—Diseases of the respiratory system, malarial fever, cirrhosis of the liver, heart diseases, chronic Bright's disease, dysentery and diseases of the digestive system.

21. *Major operations.*—Forty-two major operations were performed in the wards, all of them being among Natives; 41 cases were of paracentesis abdominis, and 1 of paracentesis thoracis.

(Signed) W. PRICE, M.D., Brig.-Surgn.-Lieut.-Colonel,
Senior Physician.

GENERAL HOSPITAL,
MADRAS, 21*st March* 1895.

ASSISTANT PHYSICIAN.

THE total number of patients treated in my wards during the year 1894 was 1,210, made up of 385 Europeans and 825 Natives inclusive of 20 Europeans and 42 Natives that remained under treatment on the 31st December 1893. Of the 385 Europeans, 239 were discharged cured, 70 relieved and 54 were discharged otherwise. Out of the total number of Natives treated, 344 were discharged cured, 175 relieved, and 200 were discharged otherwise. There were 81 deaths—8 Europeans and 73 Natives. On the last day of the year 14 European and 33 Native patients were remaining under treatment.

2. Table showing the total number of patients treated from 1891 to 1894 inclusive:—

Class.	1891.	1892.	1893.	1894.
Europeans	484	448	443	385
Natives	978	882	961	825
Total ...	1,462	1,330	1,404	1,210

It will be seen that there is a decrease of 58 European and 136 Native patients, as compared with the figures for the previous year. For some months in 1893, the Senior Physician was not in charge of any ward, the Additional Medical Officer having taken charge of his wards in addition to his own newly-opened wards, and during the whole of that year patients were admitted every other day into my wards. But, at the beginning of the year 1894, the Senior Physician took back his own old wards containing 18 Native and 16 European beds. This led to an arrangement by which I had to take all the cases admitted every fourth day and all overflow cases from the Senior Physician's wards; hence the decrease.

3. The total number of deaths including cholera was 81 against 107 of the previous year, 8 Europeans and 73 Natives giving a percentage of 5·36 deaths excluding cholera cases. The principal causes of death, as seen from the statement below, are cholera, dysentery, pneumonia, diarrhœa, pulmonary tubercle and valvular diseases of the heart:—

Deaths from—

Cholera	15
Dysentery { acute	3
Dysentery { chronic	11
Hemiplegia	2
Pulmonary tubercle	7
Ascites (cirrhosis of liver)	4
Malignant disease of liver	1
Pneumonia	8
Starvation	1
Cerebral apoplexy	2
Yellow softening of brain	1
Valvular diseases of heart	6
Fever, remittent	2
Fever, enteric	1
Tetanus, idiopathic	2
Acute neuphritis	1
Chronic diarrhœa	5
Chronic diarrhœa with serous apoplexy	1
Chronic diarrhœa with hydrothorax	1
Hydrophobia	1
Acute peritonitis with perforation	1
Acute obstruction of bowels	1
Anchylostomiasis	1
Asthma	2
Other causes	—
Total ..	81

Several of these cases were admitted in a moribund condition and 23 deaths took place within 24 hours after admission.

4. The principal diseases treated during the year were—

Among Europeans—Malarial fever, dysentery, diseases of the respiratory system, disease of the liver, &c.
Among Natives.—Malarial fevers, dysentery and diarrhœa, tubercle of the lung, chronic dyspepsia, &c.

5. *Contagious diseases.*—The Assistant Physician was in charge of the contagious sheds throughout the year. There were 17 cases of cholera (1 European cured; 16 Natives—1 cured and 15 deaths), 1 of small-pox, 7 of chicken-pox and 1 of measles. The high mortality from cholera is due to the fact that the patients suffering from this disease were generally brought into the hospital in an extreme state of collapse or when the disease had far advanced.

6. *Major operations.*—Thirty-three major operations were performed in the wards—1 European and 32 Natives. Thirty-one were cases of paracentesis abdominis and 2 of paracentesis thoracis.

7. *Remarks.*—There was as usual a large influx of cases of 'Pulmonary tuberculosis' and of 'Chronic dyspepsia with dilated stomach' from the West Coast.

Since I took charge of the wards in June 1894, I have been trying to find out how far the neamatode 'Anchylostomum duodenale' is concerned in the production of anæmia as seen in the villagers who seek admission into the General Hospital; with this object in view, microscopic examinations of the motions of all the 19 cases of anæmia admitted into my wards during the latter half of 1894 were made. In all, except two, I found a large number of ova in the motions and in some, living larvæ. Dr. Sibthorpe's clinical manual has a paragraph on the method of detecting the ovum and contains illustrations of the microscopic appearances of the parent worm, larvæ and ova. The treatment adopted was very simple and efficacious—a dose of castor-oil at bed time, 30 grains of thymol for an adult with half an ounce of arrack for each dose at 7 A.M. and 9 A.M. on the following day, followed by a second dose of castor-oil at 11 A.M. The mature worms were found in large numbers in the motions produced by the purgative. Though the British Pharmacopœia dose of thymol is only 2 grains, I have pushed the drug up to 40 grains for each dose. The patients bore the treatment well and there were no unpleasant after effects. The result so far has been very encouraging, the patients regaining their health in five or six weeks under an iron hæmatinic. The thymol treatment had to be repeated several times until not even a single ovum was visible on microscopic examination.

8. In conclusion I have to state that, in accordance with the suggestion made by my predecessor Surgeon-Captain A. E. Grant, M.B., in the two previous reports, the Senior Medical Officer was pleased to sanction the removal of all the Native Medical cases from the third storey to the wards on the bottom floor.

(Signed) R. ROBERTSON, Surgeon-Captain,
Ag. Assistant Physician.

GENERAL HOSPITAL,
MADRAS, 12*th March* 1895.

ADDITIONAL MEDICAL OFFICER.

THE wards of the Additional Medical officer were opened on January 1st, 1894, so that no comparison can be made with any figures of previous years. The total number of admissions during the year was 1,398 (375 Europeans and Eurasians and 1,023 Natives), of whom 105 (16 Europeans and Eurasians and 89 Natives) died. This gives a death-rate of 7·5 on total number treated (4·26 deaths among Europeans and 8·69 deaths among Natives).

The principal diseases treated in order of frequency were malarial fevers, bowel-complaints, respiratory diseases, chronic dyspepsia, tubercular and syphilitic affections, disease of nervous system, disease of liver.

Of the 89 deaths among Natives, 19 were admitted moribund or died within 24 hours of admission; these patients having been brought to hospital as a last resource when native medicine, incantation and other forms of treatment had already failed. The commonest cause of death in both Europeans and Natives was chronic dysentery. Almost all the fatal cases were admitted in the last stages of the disease, and not a single case of acute dysentery died. Of the cases of pulmonary tuberculosis, almost all those in which the disease was found, by physical examination, to be in an early stage and to have involved only the upper third of the lung, left hospital very much improved or quite well. Of these none returned during the year with recurrence. The deaths were among those that came to hospital with the lung already much broken down.

The valvular disease of the heart cases seldom came to hospital until the failure of the ventricular compensating hypertrophy with its attendant dropsy, bronchitis and albuminuria.

Of the fatal cases of lobar pneumonia three were double pneumonia. Calcium chloride in full doses was fairly tried in four typical lobar pneumonia cases; it completely failed to do any good in three, and the fourth was more than doubtful.

Of the anæmia cases a large number were found to suffer from anchylostomiasis; starvation and exposure caused many.

In a considerable proportion of cases of cirrhosis of liver, no previous alcoholic history existed. In all of these however hot curry had been eaten for some time.

Of the patients who came from the West Coast of India, nearly all suffered from chronic dyspepsia and enormous dilatation of the stomach. They all got well with daily washing-out of the stomach with weak permanganate of potash lotion.

Fifty-eight major operations were performed during the year, of which 50 were paracentesis abdominis and 8 paracentesis thoracis.

(Signed) G. G. GIFFARD, Surgeon-Captain,
Additional Medical Officer.

GENERAL HOSPITAL,
MADRAS, 16*th March* 1895.

SENIOR SURGEON.

DURING 1894, there were 2,184 patients treated in the Surgical wards, four-fifths of them in the Native wards and one-fifth in the European wards. The figures for the three preceding years (and for 1894) are as follows:—

Years.	Europeans.	Natives.
1891	447	1,849
1892	446	1,767
1893	469	1,644
1894	445	1,739

On the Native side, the wards during the greater part of the year were nearly always full sometimes over full, and there has been no diminution in the popularity of the hospital for cases seeking surgical aid.

Of the 445 Europeans 17 died, a percentage of 3·8; of the 1,739 Natives 109 died, a percentage of 6·2. Tabulating for comparison the figures since 1891 we find as follows:—

Years.	In Europeans.	In Natives.
1891	3·8	4·3
1892	3·3	5·6
1893	3·4	5·8
1894	3·8	6·2

No particular change in the diseases or accidents that caused the admissions into the Surgical wards occurred during the year; in fact, for some years past, the same groups of disease and varieties of accident have filled our beds. What these are I think it desirable to put on record here and therefore contrast the figures for 1891 and 1894:

Diseases.	In the Native Wards in 1891.	In the Native Wards in 1894.
Abscesses of the connective tissue	153	134
Syphilis, constitutional	107	95
Elephantiasis of scrotum	60	69
Stricture of the urethra	110	98
Hæmatocele	26	17
Hydrocele	70	62
Orchitis	11	19
Epididymitis	10	11
Strangulated ingunial hernia	32	33
Caries of bone	10	14
Necrosis of bone	43	28
Carbuncle	20	18
Epithelioma of cheek	27	35
Do. penis	17	35
Do. tongue	4	9
Tetanus	7	6
Vesical calculus	6	11

This comparison does not altogether mean that Madras itself is productive of all the diseases in this list, especially as regards the last one mentioned, for it is very rare indeed to find a stone in the bladder of a Madras town born and bred individual; and our cases of this disease have been mostly sent down for treatment from the Bellary and Kurnool districts, but as regards the rest of the diseases I have mentioned this list can be taken as a fairly representative grouping of some of the most important diseases that send in patients for surgical treatment in Madras and that necessitate a great deal of operative work for their cure or relief.

Turning to the operative work (including 41 remaining), there were 865 individuals on whom major operations were performed on surgical in-patients, and of these 865, 75 died, a percentage of mortality of 8·6, a heavier ratio by 0·6 than in the two preceding years, and I know of no other explanation for this increase than that given two years ago, viz., that the cases are not 'selected' and that attempts to give relief are made in all 'justifiable' cases; and when therefore a 'run' of unfavourable cases occurs, the figures are apt to show a somewhat gloomy aspect. On the other hand, a successful 'series' will occasionally show exceptionally brilliant results and thus in 1893 the Second Surgeon had a 'run' of nine cases of strangulated hernia, all of which recovered, while in 13 cases in the Senior Surgeon's wards in the same year, 6 died, a mortality of 46 per cent. In the year following (1894, the year under review), as till worse result is recorded, for of 20 cases of strangulated hernia admitted in to the wards (all Natives), 10 died. It is a well-known surgical axiom, that in strangulated hernia 'delay means death,' and despite the immediate resort to operation after admission into hospital of all these cases, many had delayed so long that they were dying either of peritonitis or of gangrene, or of shock and exhaustion combined—and the liberation of the strangled gut or omentum or both, by operation came too late to avert the fatal result. In this year also we had an unsuccessful series of cases of hepatic abscess—14 patients, of whom 8 died—and both in this disease and also in the varied conditions that give rise to obstruction of the bowels, the same tendency to put off coming to hospital till the condition is past relief was very noticeable during the year.

The other diseases that gave rise to large percentages of mortality were as follows:—

Diseases.	Number of cases.	Number of deaths.
Operations for malignant growth, sarcoma	13	4
Do. do. epithelioma	31	5
Do. on large abscesses in various parts of body	68	6
Do. for stricture of urethra, external urethrotomy	40	4
Do. on carbuncle	10	2

and in this group in addition to waiting so long that the condition had assumed a much more serious aspect than would have existed, had an earlier resort to hospital been practised, there were also the intrinsic difficulties and dangers of the operations themselves, more particularly of course in the group of the removal of maliguant growths.

On the other hand, even with a 10 per cent. mortality standing against it, the operation of external urethrotomy can be claimed as being a successful one when the condition of many of the patients on whom this operation is performed is considered—coming in as they do with the most aggravated forms of stricture that it is impossible to conceive and after a protracted period

of suffering and disturbance that only the most wonderful endurance of pain and ~~C~~ss could withstand.

The bright side of the picture is seen in such results as 1 death in 45 cases of elephantiasis of the scrotum, 35 cases of reducible hernia cured by operation, 34 cases of hæmorrhoids also successfully treated and 36 amputations of various portions of the extremities with 2 deaths —1 death following double amputation of legs for a 'crush' and the other amputation at the shoulder joint for spreading traumatic gangrene—and the equally satisfactory results of the operations for caries and necrosis of bones. It is particularly in the treatment of the last two groups and of compound fractures that the important result—from a surgical point of view—of the entire absence of the surgically infective diseases originating largely in defective sanitary measures comes conspicuously to the front. Not a single patient died from tetanus, pyæmia or erysipelas as a result of the operative measures undertaken for their relief, and this is not because the General Hospital is so situated or so built, or even so sanitarily administered (although very great care is taken to keep it as surgically clean as the position of the building and the habits and indifference to cleanliness of the patients themselves and of the ill-paid servants will permit) that these diseases cannot find a favourable 'nidus' for their development in the building and surroundings, for all of these diseases have prevailed in by-gone years, but the immunity is due to the advances in wound treatment that originated with Lister, and helped by the climate in Madras permitting an open air method of treatment to be carried out. Of course the present surroundings of the hospital, as well as the habits of the patients and servants, &c., above referred to, render the most recent development of wound treatment, *i.e.*, the aseptic method almost an impossibility. With clouds of dust from a much used road frequently pouring into the wards, and with a stagnant stinking ditch (the notorious Cooum) in close proximity, the difficulties of getting and keeping a patient in a condition free from septic influences are insuperable. That the results of the operative work are as good as they are is to me a strong proof of the reliability of the antiseptics in greatest use in the hospital—perchloride of mercury and carbolic acid—these together with oil of turpentine as a skin cleansing agent, and iodoform and boracic powder forming the chief agents in our armamentarium, and although they necessitate 'drainage' of most wounds as a result of their irritant action, still I consider their use indispensable in the majority of cases.

There are 154 surgical beds, exclusive of the special rooms in the Officers' quarters, all for male patients, as the long deferred union of the Women and Children's Hospital with the General Hospital has not yet been brought about.

During the year a transfer was made of 60 beds in four Native wards on the ground floor to the upper recently-erected wards on the second storey. This move has had two good results: first, the Surgical wards now get even more air than they did before, and it is impossible to give Surgical wards too much, and second, the objections made by the Assistant Physician against the upper wards as being unsuitable for some classes of medical cases during six months of the year are removed.

The patients are fairly evenly divided between the Senior and Second Surgeons, and the amount of operative work falling to each is about the same.

Operations in the Surgical Wards in 1894.

	Europeans.	Natives.	Total.
Remained	9	32	41
Performed	135	689	824
Total ...	144	721	865
Cured	90	383	473
Relieved	37	199	236
Discharged otherwise	2	33	35
Died	9	66	75
Remaining	6	40	46
Percentage of deaths	6·2	9·1	8·6

During 1894 the duties of the Senior Surgeon were carried out by Surgeon-Major J. Maitland, M.D., for the first six months of the year, and by the writer of this report for the second half of the year: 360 operations were performed in the Senior Surgeon's wards—171 by the former Officer and 189 by the latter. The figures and comments, I have already given, have outlined the general style of the operative work of the year and of the results accruing therefrom.

Some special points and cases in the Senior Surgeon's wards may now be alluded to.

First, in the return, are operations for the removal of tumours. Dividing these into the well-known groups of 'Innocent' and 'Malignant,' it is seen that the bulk of the former consists of elephantiasis of the genitals; the one death that occurred after removal was due to dysentery that unexpectedly developed in a middle-aged man, while he was well on his way to recovery a month after the removal of a 12½lb. scrotum, which had taken 7 years to attain the size present on admission, and during its growth it had divided into a two-lobed mass, the upper one of which had curiously compressed the glans penis into a small wart-like lump. This interference with the true penile tissue is very rare, for, as a rule, it is only the integuments that have undergone the characteristic hypertrophic changes, and when therefore the altered tissues are removed the organs are capable of their full functions after healing. During the process of healing, considerable contraction is apt to occur with the result that the penis is shortened—not altogether to the patients' satisfaction—and with a view to lessen this cicatrical contraction and to hasten the period of healing, the covering of the raw surface left after decortication at the time of operation, with large skin grafts taken from the thigh with a razor after the method of Thiersch has been employed by Surgeon-Major Maitland during the year. How far the first object aimed at has been attained I do not yet know, as an adequate number of the cases have not come back for inspection after a sufficient interval of time to enable the ultimate result of the case to be judged, but the second object—the hastening of the healing stage has certainly been attained. No very large mass—nothing over 58 lb. was removed during the year. When operating, considerable care is taken to seize and tie all bleeding points, and the time spent in doing so and in stopping the general oozing by the use of very hot perchloride lotion at about 120° to 130° gently irrigated over the raw surface is rewarded by the absence of all 're-actionary' hæmorrhage and by more rapid healing.

The other innocent tumours presented nothing very unusual (with one exception); they were not numerous, and this is the ordinary record. Their removal was successfully attained in all. The exception was that of a cyst in the abdomen in a middle-aged ryot who had been bed-ridden for some time in consequence of the extreme flexion and adduction of the left thigh induced by the slowly-growing (five years) swelling, that on admission occupied the whole of the left side of the abdomen and had very tense walls. It contained 8 pints of blood-stained fluid very like that in an ordinary hæmatocele of the tunica vaginalis testis. The sac wall was stitched to the skin and a few papillomatous masses about 2 oz. in weight were removed by the finger from its postero-inferior wall. Slight hæmorrhage (2 to 3 oz.) followed and this was checked by hot perchloride irrigation. The hip joints were then forcibly extended. After being put back to bed, he was restless and trying to get into a comfortable attitude. A hypodermic of morphia (¼ gr.) was given, but he died suddenly half an hour after he had been put back to bed. A *post-mortem* examination showed no other cause than shock. These cystic swellings in the abdomen are usually very obscure in causation, but if shut off from the general peritoneal cavity, their incision and full drainage are usually attended with satisfactory results.

In the cases of malignant tumours, there were many that required extensive and dangerous operations for their removal and particularly in the frequently occurring epithelioma in the region of the mouth. They most often begin in the buccal mucous membrane lining the cheek opposite the line of meeting of the teeth (and evidently due, as I have before stated, to local irritation from betel-nut chewing) and invade the alveolar margins of one or both jaws, and by the time the patients seek relief at hospital the sub-maxillary glands are generally implicated, and in some all the soft tissues of one side of the face and upper part of the neck are so extensively infiltrated that any operation to completely remove the diseased structures would be so much like an 'amputation of the head' that it has to be declined. Even in less extensively infiltrated cases when the removal is practicable of half of the lower jaw and adjoining gland tissues or of part or whole of the superior maxilla (the last for sarcomatous growths usually), these operations are peculiarly apt to be followed by severe shock in Native patients, and shock has been the most frequent cause of death in the unsuccessful cases. Septic pneumonia (the suction-pneumonia of the Germans) was met with only once after operations about the mouth, and that was in a very disappointing case of very large central sarcoma of the lower jaw in a young woman sent down from the Bellary district for operation and who did exceedingly well at first, but she developed pneumonic symptoms nearly a fortnight subsequent to, and died on, the 16th day after the removal of the whole of the lower jaw from half an inch below the articulating surfaces of the condyles. The comparative absence of this dangerous sequela (septic pneumonia), I attribute to very frequent syringing of the oral cavity and free drainage and the free use of iodoform as recommended by Butlin.

I have alluded above to the heavy mortality attending the cases of hepatic abscess. In the Senior Surgeon's wards 10 patients were operated on, of whom only 3 recovered. Of the 7 fatal cases *post-mortem* examinations were obtainable in 5, and it was found in 2 of these that multiple abscesses existed. In one of these two cases, five distinct abscesses were found in the right lobe, and the whole of the large gut (including cæcum and rectum) was studded with small ulcers collected into groups at varying intervals along the lining membrane. In the other case of multiple abscess the gut was not examined, but it may be noted that a patient in the Medical wards, who died of multiple abscess and who was not operated on, had also the association of much intestinal ulceration when examined *post-mortem*. A single abscess was found in the other three cases. In one the gut was not examined. The intestines in the remaining two showed no trace whatever of ulceration in one case, while in the other there were three acute 'dysenteric' ulcers in the ascending colon. These records, on the condition of the gut, are interesting with reference to the oft-discussed association of dysentery and hepatic abscess, and tend to show that the cases of multiple abscess are generally preceded by intestinal disease, while there is no such antecedent necessarily present in cases of single abscess; or in other words that, where there is evidence of marked dysenteric affection of

the gut preceding the onset of the liver symptoms, there is a much greater probability of the suppurating areas in the liver being multiple than when no such pre-existing implication of the bowel has occurred. This is of importance practically in this way, that in any given case of liver abscess, with a well-marked history of dysentery either preceding the liver symptoms or occurring simultaneously, I would advocate to the ordinary treatment (of incision and drainage of the abscess cavity probably found at the first insertion of the needle) the addition of exploration of the liver with further insertions from several places, so as, if possible, to secure the opening and drainage of all the abscesses at the same time.

In one case that terminated fatally the result was directly brought about by such an unusual complication that it is worthy of record, viz., hæmorrhage from the abscess cavity.

The patient was an old weakly man who stated that he had eaten very little for twenty days prior to admission. On incising the swelling of the right hypochondriac region, pus was forcibly expelled in large quantity; the cavity was gently irrigated with warm weak perchloride lotion, and then blood was observed to be welling-up rather freely, so irrigation with hot lotion (about 140°) was used, but the welling-up still continued and he became pulseless at the wrist. Rapid plugging of the cavity with gauze and six pieces of sponge was then used successfully, but, though he rallied to some extent, he died two hours after being put back to bed. *Post-mortem:* No obvious source of the bleeding could be traced in the walls of the large cavity from which the discharge had come. (There were also numerous other small abscesses in the liver and dysenteric ulceration of the cæcum and ascending colon.)

I have before alluded to the numerous cases of stricture of the urethra that are treated every year in the surgical wards and to the desperate condition which many of the patients allow themselves to reach before seeking surgical aid. With regard to the treatment adopted, I concur with the view that 'once organic stricture—always organic stricture' and that no matter whether it be treated by interrupted dilatation, continuous dilatation, forcible dilatation, with or without chloroform, internal urethrotomy or external urethrotomy, some measures must be adopted to keep up the patency of the canal at intervals varying according to individual cases, or otherwise the narrowing of the canal sooner or later inevitably recurs in the great majority of cases. Of the above enumerated modes of attaining to the desired widening of the strictured portion, I prefer, when practicable, the mode of continuous dilatation by tying-in soft, clean catheters for the rapidity and general safety with which it can be used. Should the patient exhibit intolerance of this retention of catheters in the urethra, marked usually by pyrexia of more or less severity, that the free administration of quinine and bromide of potassium will not prevent, then the slower and more troublesome method to patient and Surgeon alike, of interrupted dilatation will often be successful. Forcible rapid dilatation I but seldom employ, nor do I approve of internal urethrotomy, and for the worst cases complicated with fistulæ of varying number and extent, and but too often quite impassable by any instrument, I prefer exteranl urethrotomy and follow the plan recommended by Wheelhouse in its performance. I cannot say that I have found it possible to agree with Syme's well-known dictum 'That there is no stricture truly impermeable, and that with time and care in every case an instrument may be passed through it and serve as a guide for the knife.' That the difficulty in passing an instrument was not always due to either insufficient care, patience or dexterity. I have frequently proved by the impossibility of finding any aperture large enough to admit the finest of probes when the canal has been freely laid open in the perineum, and the opening carefully sought for and it has been necessary to continue a careful dissection backwards through often cicatrix-like tissue till the urethra was opened behind the obstruction. Having found the distal side and incised the stricture, a No. 12 gum-elastic catheter is passed through the meatus and directed into the bladder, and then tied in, the layers of perineal tissue brought together by buried catgut sutures over the sutured margins of the urethra (when practicable), and the skin incision closed throughout except at the posterior angle. The fistulæ are then laid open, erased with a sharp spoon or sometimes cut out, and the walls brought together with sutures.

The general result of these cases is very good, and the patients are discharged with a No. 10 catheter which they can pass easily, and which they continue to do for some time, and then becoming careless, neglect to keep up the necessary dilatation and return of the stricture often takes place.

(Signed) W. R. BROWNE, M.D., Surgeon-Lieut.-Colonel,
Senior Surgeon.

GENERAL HOSPITAL,
MADRAS, 18*th March* 1895.

SECOND SURGEON.

THE total number of cases admitted during the year was 1,047, including 858 Natives and 189 Europeans and Eurasians. The average daily sick was 63·08, made up as follows: Native wards 48·04, European wards 15·04. The average stay of each patient in hospital was as follows: Native 12·83 days, European (including Eurasian) 15·1 days.

Nearly every case admitted required operation; many indeed required several major operations; 331 were performed with 34 deaths or 10·2 per cent., minor 2,497, total 2,828. The

following is a brief outline of the operative work, only the major operations being referred to here:—

(*a*) *Hernia.*—For strangulated hernia there were 15 cases operated on, of these 9 recovered. All the cases admitted were operated on at the earliest moment. On admission they were all in a serious condition being complicated in the fatal cases, when admitted to hospital, with such grave lesions as gangrene of the bowel, perforation of the bowel, profound exhaustion, and stercoraceous vomiting, operation in these cases being notoriously fatal and only undertaken as a forlorn hope. Nine recoveries represent 60 per cent.—a very tolerable result in this serious disease. For reducible inguinal hernia, 15 cases were admitted and were subjected to the operation for radical cure. As far as the immediate result of the operation was concerned, 14 were cured, 1 death occurred due to suppuration and exhaustion in an old debilitated subject, considered unsuitable for operation for a long time. In all, the shortened stump of the hernial sac was inverted and fastened to the abdominal wall, and the pillars of the ring approximated with catgut sutures.

(*b*) *Elephantiasis.*—Twenty-one operations were undertaken for the relief of elephantiasis of the scrotum; all were successful. The involved tissue was completely removed in every case at the sulcus between perineum and thigh, the adjacent skin raised from the thigh on each side was then stretched over the testicles and a new scrotum thus formed, which rapidly assumed an independent existence, as it were, by fresh sulci forming as convalescense progressed. The penis also was invariably peeled, experience showing that though the skin was not obviously involved, troubles—swelling, pain, unsightliness, &c,—subsequently occurred. Theirschs' method of skin grafting was adopted in many cases, the skin of the thigh providing, with the help of the razor, large epithelial grafts with which the denuded penis was covered in at the time of operation. As a rule these grafts took well, and patients left hospital earlier than would otherwise have been the case. On account, however, of the number of cases requiring operation and the magnitude of the other surgical work in the wards, it was found impossible to graft all in this manner.

(*c*) *Amputation.*—There were 24 major amputations with 21 recoveries and 3 deaths. Amputation of the penis (10) was undertaken in all cases for cancer, and in all but one total extirpation was resorted to, the crura being removed as close to the pubic rami as possible. Very little discrimination of cases is made in these cases, all which present the faintest chance of cure are operated on. One of the successful cases seemed hopeless, the glands in one groin were enlarged to the size of an orange and ulcerating, and the organ itself was one foul ulcerated mass with the urethra completely blocked at the glans. At his urgent request, the pain being agonizing, the penis was extirpated from the perineum and the groins scooped out, a large area requiring covering in by a plastic procedure immediately after the operation. After a prolonged period in hospital and the most assiduous care on the part of everybody concerned, the man was sent home (Cuddapah) happy to his friends. Two of the cases of amputation of penis died, this was due in both cases to a combination of causes, general infection of the system, debilitating discharge, and inability of the local tissues to bear the strain of operation—a combination we know only too well among Native patients in every department of surgery. The other fatal amputation was of the shoulder. This was a little boy, 10 years old, whose fractured arm was put up in "lathes' mud and fowl's blood" by some of his ignorant friends in such a way that, on admission, the terribly fatal 'spreading traumatic gangrene' had set in, which, as the result showed, operative measures failed to relieve, the gangrene having spread to the trunk. With these exceptions the amputations were successful and included of the penis 10, foot 4, leg 3, thigh 2, forearm 2, shoulder 1, wrist 1, finger 1.

(*d*) *Operations on the bladder.*—Supra pubic lithotomy was performed in four cases of vesical calculus, one calculus weighing two ounces and a hundred and seventy-five grains. All these recovered without a bad symptom, and three without an appreciable rise of temperature, the urine resuming its normal course through the urethra on the 19th day as a rule. Tapping of the bladder (above the pubis in all cases) was performed several times for retention of urine, but this operation was in all cases followed by one undertaken for the actual cause of the retention (chiefly stricture). Three vesical calculi were crushed with the lithotrite, two successfully, these latter recovering readily in a few days. The third was one of those cases fortunately rarely seen, a large stone in the bladder complicated by a tight impermeable stricture of the urethra, the stone being unsuspected till the patient was under chloroform and an opening made during external urethrotomy; a uric acid calculus was then discovered embedded in a vast mass of phosphatic deposit which took a very long time to crush and remove. The patient was old, emaciated and worn out from long-standing disease, however and he only survived the operation a few hours. One case of bladder trouble was admitted suffering from cystitis, offensive urine and enlarged prostate and median cystotomy seemed to hold out the only hope of checking the septic absorption going on, but chronic poisoning carried him off in spite of the operation. A case of rupture of the bladder was admitted due to a crush by a falling wall. The bladder became offensive and was washed frequently with boracic solution, but the grave constitutional symptoms continued with constant pain in the right flank; this was explored and foul urine discovered deeply in the abdominal wall, the space communicating with the bladder freely as shown by the ease with which a stream of warm lotion was made to pass along the urethra,

bladder and out through the incision made. The patient however succumbed to the multiplicity of his injuries which included fractures of the pelvis, ribs and arm.

(*e*) *Tumours.*—Both malignant and benign tumours were removed by the knife. Besides smaller and less important ones, 27 serious cases were operated on. Four were sarcomas, of which 2 died; one of them was large and deeply seated in the front of the thigh, apparently growing from the periosteum, it had formidable attachments and hæmorrhage was very profuse, so much so that he did not rally after the operation. The naso-pharyngeal tumours gave most trouble, 8 were operated on with 3 deaths. As a rule they were large, tough and fibrous with very broad and vascular attachments, profuse bleeding being the result of removal in nearly all. The causes of the death in the fatal cases were shock and exhaustion from hæmorrhage. One of the successful cases presented an enormous tumour filling up one side of the nasal cavity and the whole pharynx, rendering the swallowing of solids impossible, profuse bleeding frequently occurred before admission and the hard palate was converted into a soft pliable partition on account of the pressure. This partition was slit up and the tumour removed with considerable difficulty owing to its tough nature, and much loss of blood which left him anæmic for many days after. The other tumours presented no unusual feature; the list included, non-malignant (unclassed) 7, lipoma 1, malignant growth 2, fungating tumour 1, dermoid cyst 1, and keloid growth 1.

(*f*) *Liver abscess.*—Four liver abscesses were operated on with one death. Free early incision was made in each case and a counter-opening when possible, the operation being completed at one sitting. One of the cases was a very small abscess and previous to operation a needleful of pus was drawn off; this spot was cut down on and near it was discovered another small collection of pus (about two drams) which was opened up. Further exploration failed to reveal any further collections. The patient had a long tedious convalescent period and the conclusion seemed irresistible that other small abscesses were present which ultimately became dry and innocuous. A very interesting feature in this case was the previous existence of dysentery for which the patient was admitted a fortnight before operation. The one fatal case was admitted in a bad state, a man of intemperate habits and miserable constitution. He lived however for seven weeks after operation, and the *post-mortem* examination revealed the fact that no attempt at healing or contraction of the abscess had taken place, though nearly the whole of the right lobe of the liver was available to carry on the work of the organ. Exhaustion carried him off.

(*g*) *External urethrotomy.*—This operation was undertaken in all cases for the relief of stricture of urethra; 22 operations were performed with 3 deaths. All varieties and degrees of stricture were operated on, some indeed in an almost hopeless condition, the subjects of blood poisoning from the constant presence of foul urine in the bladder and chronic discharge from neglected sinuses. It is indeed marvellous how some of them recover; many seem to acquire an immunity similar to what occurs among patients amid very unhygienic surroundings. In most of the cases, the bladder required washing out with warm boracic lotion, a proceeding indeed in which our students soon become proficients.

(*h*) *Internal urethrotomy.*—Four cases were operated on, all successful. Tough elastic strictures admitting only a small instrument were thus dealt with. The cases readily recovered.

(*i*) *Operations on tunica vaginalis.*—For the relief of hydrocele and hæmatocele 28 operations were performed. Excision of the tunic (parietal) was usually done with free scraping of any remaining tissue. Rarely the testicle was also removed, though the preserving of it meant prolonged convalescence in some cases and increased anxiety in the after-treatment. In one case of double hæmatocele in a young man, complicated with extremely thick tunics, healing was delayed after double excision; but a plastic operation, by which the protruding testicles were replaced in the scrotum with careful stitching of the pared edges of the latter, soon brought the scrotum into a sound healthy condition without any more serious procedure.

(*j*) *Removal of diseased glands.*—There were 13 operations undertaken to remove diseased and enlarged glands including venereal buboes in the groins and swollen glands due to various causes scrofulous and otherwise. In all the non-venereal cases healing took place readily by first intention as a rule; convalescence in the venereal cases was always protracted.

(*k*) *Operations for the relief of fractures.*—Operations were frequently undertaken in compound fractures, particularly of the tibia and fibula, so as to allow the proper setting of limbs. Resection of broken ends which were protruding was very successful. One case of simple fracture (of the patella) was operated on fourteen days after the injury. A silk ligature was made to pass, by means of a large curved handled needle, behind the petella, then in front of it, between it and the skin, and then tied so that the two halves of the broken bone were firmly held together. This was very successful, the patient in a short time being able to use the limb as before, to walk up and down stairs, &c. Six months after operation this good result was still maintained.

(*l*) *Operations on diseased bone.*—There were 18 cases operated on as a rule by removal of carious bone with forceps and scraper; all did fairly well.

(*m*) *Piles.*—Fifteen cases were operated on usually by ligature; some of the cases proved troublesome owing to the state of rectum, but it is a very successful operation as a rule.

(*n*) *Abscesses.*—Of large abscesses and those occurring in important situations, there were 44 with 3 deaths; every case of suppuration is at once submitted to operation.

(*o*) *Tracheotomy and laryngotomy.*—These operations, of which there were 5, were undertaken as a rule for relief only. All were relieved; in one, a case of syphilitic laryngitis, the operation contributed largely to the very good cure that resulted.

(*p*) *Operations on the mouth.*—There were 3 cases of removal of the tongue for cancer with 1 death, 2 cases of removal of the lower jaw for the same disease with 1 death. Nearly, always, the disease is very far advanced in these cases when admitted to hospital, and the operation is a formidable one as a result.

(*q*) *Laparotomy.*—Four cases were submitted to this operation. The condition in 3 of these was absolutely hopeless, and if by any possibility this condition could have been accurately diagnosed beforehand, it would be a question whether an operation would have been undertaken. In the fatal cases, death in all was due to the disease, and in no way connected with the operation itself. Only 1 case recovered, a case of obstruction of the bowels in a boy due to a constricting band of obscure origin. The 3 fatal cases were admitted for such hopeless conditions as twist of bowel, gangrene and perforation (1), ulceration and perforation of bowel (1), pancreatic hæmorrhage (1). Three of these cases (including the one that recovered) were operated on by Surgeon-Captain Williams.

Other operations undertaken during the year: Trephining (1), castration (3), carbuncle (6), excision of upper jaw (2), ligature of femoral artery for aneurism (1), fistula (4), besides many of less interest. These all recovered with the exception of the aneurism case which succumbed to exhaustion following gangrene of a limited portion of the leg due to ligature of the vessel, notwithstanding that every care was taken to avert it.

The following shows the admission for fractures during the year:—

	Natives.	Europeans and Eurasians.
Simple fractures	43	3
Compound fractures	16	2

The compound fractures were usually of the bones of the leg or forearm; they were all cases where the question of amputation arose, but it was decided to give a fair chance to conservative surgery and the power placed in our hands by the antiseptic system, and in every case the decision was justified. These 18 compound fractures however demanded time and trouble, besides the expenditure of dressings and antiseptics which would have been saved by the much more ready and effectual amputation, but no one would, for a moment, sanction such a proceeding.

Surgeon-Captain C. L. Williams acted for one month while I was on privilege leave.

I have to acknowledge the help and advice so readily given many times by Surgeon-Lieut.-Colonel Brown in cases of difficulty and gravity.

(Signed) F. J. CRAWFORD, M.D., Surgeon-Captain,
Second Surgeon.

GENERAL HOSPITAL,
MADRAS, 16*th March* 1895.

OUT-PATIENT DEPARTMENT.

THE total new admissions during the year under report again show an increase on the figures of 1893, namely, 50,815 as against 49,621. This shows continued and increasing confidence of the poor in the institution. The increase took place in both classes of patients—of Europeans and Eurasians from 8,171 to 8,465 and of Natives from 41,450 to 42,350. Doubtless the more commodious rooms for their reception have something to say to this. But the average daily sick decreased from 351·46 to 343, *i.e.*, the number of new patients was greater, but each patient attended fewer consecutive days. This was due to the discouragement of Sunday attendances. Many patients had got into a habit of strolling up to hospital on Sunday partly from habit, partly from having nothing else to do. Doubtless it had not occurred to them that this involved work to apothecaries, hospital assistants, students, dispensers, coolies, sweepers, writers and the whole staff which was quite unnecessary; whereas if only more or less urgent cases are attended to, a certain amount of rest is secured to all these people and they do their remaining six days' work all the better for not being wearied and jaded with an unbroken monotony of work recurring with unerring regularity for 365 days in each year. In fact the object has been to prevent the staff getting 'stale.' With this object in many cases two days' medicine has been issued on Saturday.

The major operations numbered 87 and the minor 3,365. The latter is an increase on the 2,910 of last year: the former a slight decrease. An out-patient *clinique* not being a favourable place for major operations none were submitted to operation, who could be persuaded to stop

in the hospital; and indeed in a revised nomenclature it would be worth considering if any operation that can be done on an out-patient can really be a major one.

The regular staff, as last year, consisted of myself, a Senior and Junior Apothecary, and occasionally a second Junior Apothecary. A permanent second Apothecary would be a valuable addition, as it would make all the difference between haste and deliberation and would allow me ample time to superintend the students without keeping the patients waiting. When I am engaged at an autopsy one apothecary may have to see 220 patients in about 2½ hours which barely allows of his doing them justice.

Mr. Mahomed Ghouse still gives his valuable help and Mr. B. Harris, L.R.C.P., Ed., an old student of this school, also voluntarily assisted for many weeks in the department.

The opportunities of filling Women and Children's wards are no less than last year, and the waste of clinical material is just the same; and the distress, to those who are seriously ill, or have come from long distances up-country, of going on to the Women and Children's Hospital; perhaps only to find there is no room, is very considerable.

(Signed) C. L. WILLIAMS, M.D., Surgeon-Captain, I.M.S.,
Acting Resident Medical Officer.

AUTOPSIES.

THE total number of autopsies performed in 1894 was 109, of which 28 were only partial or incomplete and 81 complete. In the latter every organ was systematically examined. In the former, for various reasons, the cause of death was alone ascertained. Nearly all the autopsies were made by myself, but Surgeon-Captains Simpson and Giffard each performed a few. Almost the whole field of pathology has been passed in review before those students who have attended regularly and their opportunities for studying morbid anatomy have been extremely ample. The causes of death were as follows:—

Dysentery	12
Pneumonia, lobar	6
Pneumonia, lobular	2
Abscess of the liver	7
Cirrhosis of the liver	6
Obstruction of the bowels, volvulus	3
Obstruction of the bowels, strangulated hernia	2
Obstruction of the bowels, chronic intussusception	1
Malarial fever	5
Multiple injury	4
Perforation of the intestine	4
Perforation of the stomach	3
Heart disease (one being an aneurism of the heart)	4
Bright's disease	3
Septicæmia	2
Cerebral hæmorrhage	2
Cerebral thrombosis	1
Cerebral thrombosis and softening	1
Tubercular pericarditis	2
Vesical calculus	2
Renal calculus	1
Cystitis	1
Diarrhœa	2
Diarrhœa from intestinal ulceration	1
Enteric fever	1
Cancer of the liver	2
Cancer of the mesentery	1
Tetanus traumatic	2
Pulmonary tuberculosis (one being an acute miliary tuberculosis)	2
Myelitis	1
Spinal meningitis	1
Asphyxia from compression	1
Pyopneumo thorax	1
Perityphlitic abscess	1
Pyæmia from necrosis of the jaw	1
Ulceration of the pharynx	1
Interstitial nephritis (causing death after an operation for elephantiasis)	1
Anæmia	1
Anchylostomiasis	1
Multiple hydatids of abdomen	1
Cyst in abdomen	1
Starvation	1
Hg Cl_2 poisoning	1
Hydrophobia	1
Tubercular peritonitis	1
Debility	1
Suppurative pancreatitis	1
Hæmorrhagic pancreatitis	1
Malignant disease of the stomach	1
Stricture of the rectum	1
Alcoholism	1
Aortic aneurism	1
Scald	1

Of the abscesses of the liver, ulceration in the large intestine was present in four, not noted as present or absent in two, and absent in one in which the clinical history was a very definite one of chill in a cold bath. Anchylostomiasis caused one death, but the parasite was present in 50 per cent. of the cases and its presence formed the subject of a communication to the recent medical congress in Calcutta. The cases of multiple hydatids in the abdomen, of corrosive sublimate poisoning, of hydrophobia, and of pancreatic disease were all cases of very unusual interest, and the opportunity of seeing them is not likely to occur often in a student's career.

The students were regular in their attendance and have been made to use their hands as well as their eyes for the examination of pathological specimens, and each student in his or her turn has actually performed all or nearly all the manipulations necessary in making a *post-mortem* examination.

(Signed) C. L. WILLIAMS, M.D., Surgeon-Captain, I.M.S.,
Acting Resident Medical Officer.

DENTAL SURGEON.

From C. F. BADCOCK, Esq., Dental Surgeon, General Hospital, Madras, to the Senior Medical Officer, General Hospital, Madras, dated 12th February 1894.

I have the honour to inform that, from 15th November 1894 to 31st December 1894, 81 cases were treated as follows:—

Extractions	67
Fillings	1
Other treatment	13
Total	81

(Signed) C. F. BADCOCK,
Dental Surgeon.

No. 2.—GOVERNMENT WOMEN & CHILDREN'S HOSPITAL.

ADMINISTRATION REPORT.

The income under the heading Medical officers was Rs. 25,366–13–3 against Rs. 23,616–3–7; this increase was due to the difference in salaries drawn by the Medical officers.

The increase of Rs. 10–5–0 under the head of registers and forms is due to a large number of books and blank forms sent for printing.

The cost of European medicines for the year under report was Rs. 3,433–6–7 against Rs. 2,915–9–0, showing an increase of Rs. 517–13–7, which is due to the unusually large daily sick treated during the year.

There is an increase by Rs. 379 for dieting charges over that of the previous year; this also can be explained by the large average daily sick.

The sum of Rs. 7,239–9–1, shown as miscellaneous charges, includes the salaries of extra servants and punkah coolies, municipal taxes, cost of bedding and clothing, hospital miscellanies, bazaar medicines and hospital necessaries.

The recoveries from paying patients for the year under report is Rs. 1,371–4–0 and the sum for the previous year was Rs. 1,567–2–0; the decrease is due to a smaller number of paying patients being admitted during the year.

Under Miscellaneous receipts Rs. 24–2–0 is shown as the amount realized by sale of condemned articles.

Nurses.—Of the 37 nurse-pupils sent here for training as sick nurses during the year, 24 passed a satisfactory examination in sick nursing and were transferred to the Midwifery Class of the Government Lying-in Hospital by order of the Surgeon-General with the Government of Madras.

I do hereby certify that the inventory of the valuable stock of this hospital has been duly checked by me on the 20th December 1894 and found correct.

PROFESSIONAL REPORT.

The number treated during the year under report was 3,507 against 3,542 in the previous year, showing a decrease of 35. Many cases had to be refused admission to prevent overcrowding, and at other times to enable repairs and whitewashing of the building to be carried on. The daily average number was 131·00 out of 132 beds against 120·32 of the previous year, showing an increase of 10·64 in the daily average sick; 99·24 per cent. of the beds were occupied as compared with 90·99 per cent. in 1894 or an increase of 8·25 per cent. The high average daily number for the year under report is very satisfactory.

There were 177 deaths against 186 of the previous year, showing a decrease of 9·00, and the actual causes of mortality were exhaustion, and 42 cases were admitted in a moribund state, viz., dysentery 5, malarial fevers 3, rheumatic affections 1, tubercular affections 6, disease of the nervous system 1, disease of the circulatory system 1, disease of lungs 5, diseases of digestive system 7, spleen disease 1, kidney diseases 2, all other general diseases 9, general injuries 1.

Sixty-two cases were removed from hospital in a moribund state, viz., dysentery 7, malarial fevers 6, rheumatic affections 5, tubercular affections 6, all other general diseases 13, diseases of nervous system 7, disease of the lung 1, diseases of the digestive system 8, diseases of the spleen 1, diseases of the connective tissue 2, and ulcers 6.

There were no deaths from septic disease acquired in hospital, but 3 deaths from puerperal fever acquired previous to admission.

There was an increase in the admissions under diseases of the respiratory system and malarial fevers; the former due to heavy rain and the latter to many seeking admission from malarial out-lying districts. It is also to be noted that our admissions under small-pox were *nil* for the year under report, whereas there were 66 admissions last year.

There is no explanation to give as regards fluctuations in sex, as the difference is insignificant, but there has been an increase in the admissions among other classes, showing that the lower classes appreciate the institution to a greater extent than the caste Hindus.

Epidemics.—Several cases of measles and chicken-pox were admitted from the orphanages in Madras during the year under report. Most of them were of a mild type and no deaths

occurred amongst them. Only 6 cases of cholera were admitted during the year with 4 deaths. The practice of bringing cases of cholera from all parts of Madras for treatment here is most objectionable; carriage and roads are poisoned and cholera germs disseminated *en route*. I strongly recommend that each district be provided with accommodation for cholera cases.

Diseases of the Nervous System.—Eighty-one were treated, of which 7 were idiopathic tetanus and 1 traumatic, which proved fatal; of the 7 cases 4 were cured by large doses of chloral and bromide of potassium and 3 were taken away by friends as no better.

Snake-bite.—This occurred to a girl of 13 years, who was brought to hospital on the 6th October 1894. Four punctures were seen on the dorsum of left foot, patient frequently getting drowsy. Free incisions at the punctures and rubbing with Pot. permanganatis and liquor ammonia; liquor strychnine ♏ v injected hypodermically, and liquor ammonia fort. ♏ x in an ounce of water every third hour was the treatment adopted. On the following day there was a bloated face with swelling of body attended with giddiness. She was then given a saline purgative followed by iron and sulphate of magnesium three times a day. The wound also sloughed which was poulticed and dressed antiseptically. She made a good recovery and was discharged on the tenth day after admission.

Belladonna poisoning.—This was a Brahmin woman who took by mistake about 2 drachms of belladonna pigment which she had at home to paint her breast. On admission the patient was quite unconscious attended with dilatation of pupils, occasional twitchings of the whole body, full and bounding pulse and a temperature of 102° F.; viii ♏ of apomorphine solution was injected hypodermically. Free vomiting set in, smelling strongly of belladonna. Animal charcoal in milk and alkalies evaporating lotions to the head and hypodermic injection of morphine solution was adopted. Patient discharged cured on the third day of admission.

Injuries.—Amongst injuries, 39 were burns and scalds and 143 local injuries; of the former 27 were children, and most of them were burnt extensively. Five proved fatal from exhaustion and three from shock. The others recovered without deformity. No hæmorrhage from bowels was noticed in any of the cases of burns. Among other local injuries many were cases brought in by the Police as carriage accidents.

Operations—

Major	60
Minor	148

Most of the minor operations have been performed by the Medical subordinates. Important and interesting major operations are as follows:—

Fibroma of Cheek.—This was a tumour about the size of an egg, situated in the right cheek, removed by dissection, and which healed by first *intention*.

Sarcoma of Shoulder.—A sarcomatous ragged-looking tumour of two years' duration, the size of a large orange, situated on the left deltoid muscle, emitting a most offensive odour, dissected out by the knife and allowed to granulate for want of skin covering. Antiseptic dressing was adopted and the patient is still under treatment—doing well.

Ascites.—Paracentesis abdominis was performed in 34 cases; many of these contained more than 20 lb. of fluid, and the ascites in many cases was due to heart, liver, spleen and kidney diseases. Of these, 2 were cured by one 'Tapping' and diuretics and the rest relieved. Only 1 death amongst them.

Caries of the Lower jaw.—This was a boy suffering for about two years; a large incision was made and a portion of bone removed—discharged cured.

Other interesting cases.—*Albuminuria in a child.*—Child P., aged about 4½ years, was admitted with dropsy of lower extremities and abdomen, said to have come on after exposure to wet and rain. This child passed large quantities of albumen for several days, even so much as 80 per cent. He improved under the following treatment, *i.e.*, hot packs, diaphoretics, cupping to loins, paracentesis abdominis (several times) as much as 21 lb. being evacuated. At times, when dropsical symptoms had abated, iron in the form of perchloride was administered and the child was discharged relieved on the 1st October 1894. The child was seen after this doing well. In this case diet was strictly observed, being almost confined to vegetable farinaceous food and milk with hardly any animal food.

A case of diphtheria—Sent in by a Medical officer from Fort St. George on the 5th July 1894. The case was a very well-marked one, the disease being fully developed on admission. Fauces, pharynx and tonsils covered with a dense wash leather looking membrane; difficulty in swallowing, enlargement and pain in the cervical glands. Fever never ran very high; but after the membrane was all cleared away, the tonsils and uvula were almost destroyed. Exhaustion began to set in and the patient died suddenly from syncope. Treatment—antiseptic gargles, quinine, chlorate of potash, &c., strong broth, wine and brandy.

(Signed) A. L. HACKETT, Brig.-Surg.-Lt.-Col.,
In charge of Hospital for Women and Children.

Hospital for Women and Children,
1*st January* 1895.

No. 3.—GOVERNMENT LYING-IN HOSPITAL.

ANNUAL REPORT OF THE MADRAS GOVERNMENT LYING-IN HOSPITAL FOR 1894.

ADMINISTRATION REPORT.

Internal Economy.—The total expenditure of the Hospital and Egmore Female Dispensary for out-patients, excluding the Superintendent's salary, has been Rs. 68,352–11–0. Of this sum Rs. 8,085–2–7 was spent on buildings and repairs, house, water and lighting taxes, leaving a sum of Rs. 60,267–8–5 for general expenditure.

The daily cost of dieting each European and East Indian woman has averaged annas 9 and pies 7, including all extras and stimulants.

The daily cost of dieting each native woman has been annas 3 and pies 10.

The recoveries as hospital stoppages paid to Government from European and East Indian women amounted to Rs. 7,391—an increase of Rs. 491–15–0 compared with the year 1893.

No recoveries were made from native patients.

Midwifery Class.—The expenses of this class amounted to Rs. 1,805–12–10 exclusive of Rs. 193–12–0 on account of military nurse pupils.

Eighteen European and East Indian and 22 native pupils have received diplomas during the year, and Rs. 99–8–0 have been received as diploma fees.

Fifteen European and East Indian and 2 Native women have been educated as unstipended pupils.

Forty native women have been under training from various Local Fund Boards and Municipalities or Branches of the Dufferin Fund.

Twelve native midwives have obtained appointments through this hospital to up-country stations and dispensaries.

Eight European or East Indian pupils and 8 native pupils were either dismissed or permitted to resign as unable to qualify.

Twelve European and East Indian and 32 native pupils remain under training.

The nursing is carried out entirely by probationers, who, as soon as they are qualified, leave the hospital. This constant changing is not conducive to the welfare of patients. The majority of women who join the nurse class have no natural liking for the work and are often very ignorant, but owing to the small staff they have frequently to be placed in very responsible posts, for which from the amount of knowledge they possess they are unfitted.

Surgeon-Lieutenant-Colonel A. M. Branfoot, M.B., was in charge up to the 26th February 1894, when I succeeded him. Assistant Surgeon S. E. Falconer was Resident. Mr. W. T. Kenny in charge of the gynæcological block, and Mrs. Lambie, matron, throughout the year. I have to record my thanks for the efficient help they have afforded me and the able manner in which they carried out their various duties.

PROFESSIONAL REPORT.

THE number of admissions during the year was as follows:—

Delivered in hospital, including abortions		1,939
Delivered on the way to hospital		32
Died undelivered		9
	Total	1,980
Diseases of pregnancy and gynæcological cases		1,407
	Grand Total	3,387

Class.	*Division.*	*Sub-division.*			
I. Natural	Purely natural	Born occipito-anterior (417)		1,373	
		Do. do. posterior (2)		7	
	Varieties	Face (5)		3	
		Brow (3)			1,383
II. Difficult	Tedious	Natural powers over 24 hours	36	36	
	Laborious	Barnes' elastic bags	2		
		Forceps	117		
		Version, podalic	1		
		Do. do. and forceps	3		
		Do. cephalic, and forceps	2		
		Do. do. and craniotomy.	1		
		Cephalotripsy	12		
		Cæsarian section for calculus in bladder	1		
		Cæsarian section for cicatricial contraction of vagina	1		
		Symphysiotomy	1		
		Exhaustion—protracted labour	1	142	178
III. Preternatural.	Inverted	Breech (10)	11		
		Foot (11)	8	19	
	Transverse	Arm (7)	6	6	
	Compound	Head and hand (4)	3		
		Brow and hand	1		
		Breech and foot	2		
		Breech and hand (1)	..		
		Hand and foot (1)	..		
		Head and foot (1)	..		
		Head, hand and foot (1)	..	6	31
IV. Complex	Plural births	Twins (2)	28		
		Triplets	1	29	
	Hæmorrhage	Accidental hæmorrhage (2)	9		
		Placenta prævia	14		
		Post-partum hæmorrhage (6)	44	67	
	Retained placenta.	Simple retention	10		
		Morbid adhesion	5	15	
	Puerperal convulsions.	Eclampsia (2)	25	25	
	Descent of funis	With head (1)	8		
		Do. do. and arm	2		
		Do. do. and foot	1		
		Do. do. hand and foot	1		
		Do. arm	5		
		Do. breech (1)	1		
		Do. feet	3	21	
	Rupture of uterus, &c.	Laceration of vagina	2		
		Rupture of uterus or vagina	2	4	
	Other complications	Albuminuria and anasarca	10		
		Anæmia and anasarca	5		
		Anæmia	8		
		Asthma	3		
		Bi-lobed uterus	1		
		Bronchitis	1		
		Broncho-pneumonia	1		
		Dysentery	14		
		Elephantiasis	1		
		Heart disease	5		
		Intermittent fever	3		
		Lymphangitis	1		

N.B.—The figures within brackets refer to the number of similar labours in other divisions.

Class.	*Division.*	*Sub-division.*			
IV. Complex—*cont.*	Other complications—*cont.*	Lupoid disease of vulva	1		
		Macerated fœtus	31		
		Malarial cachexia	2		
		Phthisis pulmonalis	2		
		Placental disease	3		
		Pneumonia	2		
		Privation	2		
		Prolapse of uterus	5		
		Remittent fever	3		
		Syphilis	17		
		Vaginitis	1		
				122	
	Abortions	Abortion, simple	24		283
		Albuminuria and anasarca	3		
		Anæmia	1		
		Blighted ovum	1		
		Bipartite uterus	1		
		Bronchial catarrh	2		
		Broncho-pneumonia	1		
		Carneous mole	4		
		Dysentery	7		
		Excess of liquor amnii	1		
		Heart disease	2		
		Hydrocephalic fœtus	1		
Fœtus under 2 lb.		Monster fœtus, exomphalos	1		
		Macerated fœtus	5		
		Parotitis	1		
		Pneumonia	1		
		Placentitis	1		
		Peritonitis before admission	2		
		Puerperal convulsions	2		
		Retained placenta or ovum	34		
		Retroversion	3		
		Syphilis	1		
		Twins	2		
		Ulcer of labium	1		
		Vesicular mole	3		
				105	105
					1,980

OBSTETRIC OPERATIONS.

Acceleration of labour by Barnes' elastic bags.	Difficult	Head presenting (1)	2		
	Complex	Accidental hæmorrhage (1)	..		
		Placenta prævia (3)	..		
		Puerperal convulsions (4)	1		
		Other complications (2)	..	3	3
Forceps	Difficult	Head presenting	115		
		Face do.	2		
		Head presenting after podalic version	3		
		Face presenting after cephalic version	2	122	
	Preternatural	Inverted (breech)	1		
		Do. (foot)	1		
		Compound, brow and hand after podalic version	1		
		Compound, head and hand after cephalic version	1	4	
	Complex	Twins	3		
		Do. head and hand presenting after cephalic version	1		
		Accidental hæmorrhage	4		

N.B.—The figures within brackets refer to the number of similar labours in other divisions.

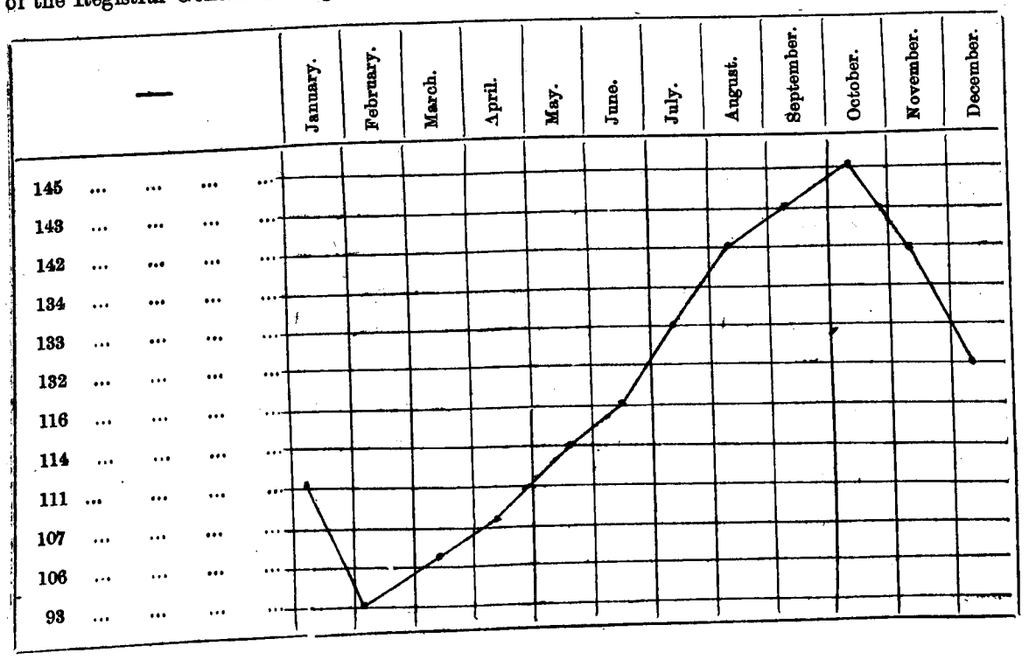
Class.	*Division.*	*Sub-division.*			
Forceps—*cont.*	Complex—*cont.*	Placenta prævia	2		
		Post-partum hæmorrhage (breech after extraction)	1		
		Morbid adhesion of placenta	1		
		Puerperal convulsions	12		
		Descent of the funis	1		
		Descent of the funis after cephalic version	1		
		Descent of the funis after podalic version	2		
		Dysentery	3		
		Heart disease	1		
		Prolapse of uterus	1		
		Syphilis	1		
		Vaginitis	1	35	161
Podalic version	Difficult	Head presenting (forceps failed)	1		
		Do. do. (3)	..	1	
	Preternatural	Arm (1)	3		
		Compound (1)	1	4	
	Complex	Twins	1		
		Placenta prævia	4		
		Descent of funis (2)	3		
		Rupture of vagina	2		
		Dysentery	1		
		Macerated fœtus	2	13	18
Cephalic version.	Difficult	Face presenting (3)	..	..	
	Preternatural	Compound (head and hand) (1)	..	..	
	Complex	Twins (head and hand) (1)	..	..	
		Funis presentation (1)	..	..	..
Extraction	Preternatural	Breech (1)	1		
		Feet (2)	..		
		Compound (1)	..	1	
	Complex	Twins	2		
		Post-partum hæmorrhage (1)	..		
		Descent of funis	2		
		Macerated fœtus (1)	1	5	6
Cephalotripsy	Difficult	Head presenting (forceps failed) (5)	12		
		Face presenting after cephalic version	1	13	
	Preternatural	Feet after extraction	1		
		Arm after version	1		
		Compound (1 after extraction)	2	4	
	Complex	Accidental hæmorrhage	1		
		Placenta prævia (1)	..		
		Post-partum hæmorrhage (after extraction)	1		
		Puerperal convulsions	2		
		Descent of the funis	2		
		Rupture of vagina	2		
		Prolapse of uterus	1		
		Macerated fœtus (after extraction)	1	10	27
Decapitation	Preternatural	Arm	1	1	
	Complex	Arm and funis	3	3	4

N.B.—The figures within brackets refer to the number of similar labours in other divisions.

Class.	*Division.*	*Sub-division.*			
Symphysiotomy ..	Difficult	Head presenting, contracted pelvis	1	1	1
Cæsarian section, simple.	Difficult	Cicatricial contraction of cervix and vagina	1	2	2
		Calculus in bladder	1		
Laparotomy ..	Complex	Rupture of vagina	1	1	1
Induction of premature labour.	Complex	Anæmia	2	6	6
		Dysentery	1		
		Heart disease	1		
		Macerated fœtus	1		
		Syphilis	1		
Induction of abortion.	Abortion	Dysentery	1	3	3
		Heart disease	1		
		Retroflexion	1		
					232
Spontaneous evolution.	Preternatural ..	Arm	1	1	1

The total number of confinements shows a decrease of 92 compared with the previous year. The decrease is probably due to a smaller number of marriages having taken place during the previous year owing to the high prices of food-grains, although the chief falling off in the numbers appears to have been among women of between 25 to 29 years of age. The percentage of primiparæ fell from 24·06 in 1893 to 22·63. The monthly average has been 165·0, being an increase of 5·73 compared with the average of the previous five years. The largest number of deliveries took place in September, when there were 202 births, and the smallest in February, viz., 131.

During the busy months the resources of the hospital were much taxed. The highest number of patients in any one day was 137 and the lowest 77. The following is a chart of the incidence of child-birth during the thirty years ending 1894; it agrees in the main with figures of the Registrar-General in England :—



Races and Castes.—The percentage of the various races and castes is shown in the following table :—

Europeans	37	or	1·97 per cent.
Eurasians	324	or	16·36 do.
Native Christians	269	or	13·58 do.
Muhammadans	52	or	2·63 do.
Hindus	426	or	21·51 do.
Pariahs	872	or	43·95 do.
Total ..	1,980	or	100·00

With regard to Hindus the following table shows the number of each of the chief castes admitted :—

Brahmins	2
Rajputs	7
Raju	1
Mudali	96
Naicker	105
Ediyar	22
Vellala	13
Chetty	8
Reddi	5
Graminee	1
Janiper	2
Koraver	3
Baliju	1
Pillay	2
Kamala	13
Vanniyar	16
Shanar	10
Oobber	4
Oodder	2
Kanaker	3
Sathaney	1
Pandaram	3
Kavaray	80
Naran	1
Unknown	25
Total ..	426

The deliveries may be thus classified :—

Natural labour	1,383	or	69·84 per cent.
Difficult do.	178	or	8·98 do.
Preternatural labour	31	or	1·56 do.
Complex labour	283	or	14·30 do.
Abortions	105	or	5·32 do.
Total ..	1,980	or	100·00

This shows a decrease of 144 among natural labours, and an increase of 42 morbid labours when compared with the previous year.

Of the 1,971 deliveries (9 women died undelivered, 7 at full term and 2 under seven months); 1,503 were delivered at or near full term, 321 were premature, 44 were delivered of macerated children and 103 were abortions.

Of the 9 women who died undelivered, all were in a very bad condition on admission, 3 were cases of puerperal convulsions, 1 of pneumonia (abortion), 1 of albuminuria with hydrothorax (abortion), 1 accidental hæmorrhage, 1 placenta prævia, 1 heart disease and 1 of protracted labour. The women, in all cases, were too low to attempt artificial delivery.

The percentage of births at successive quinquennial periods shows the greatest fecundity among all classes to occur between the ages of 20 and 24 years.

Ages of women—Years	13 to 19	20 to 24	25 to 29	30 & above	Total 1,980
Number of women	366	782	482	350	

I.—Natural Labour.

There were 1,380 labours in which the head presented, and 3 in which the face presented, and the labour was terminated within 24 hours without complication. The percentage of primiparæ was 22·63, and the average duration of labour was 8·8 hours.

Mortality of mothers 3—*Vide* Cases Nos. I to III.

The following table shows the ages, number of pregnancy and number of hours in labour of the women in this class :—

Ages of women—Years ...	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	Total 1,383
Number of women ...	2	7	33	44	59	55	167	64	127	100	126	131	84	40	74	24	90	17	15	15	15	39	4	5	9	3	4	

Number of pregnancy ...	1	2	3	4	5	6	7	8	9	10	11	12	14	Total 1,383
Number of women ...	313	247	252	178	146	82	72	41	28	11	8	4	1	

Hours in labour	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 12	12 to 18	18 to 24	Unknown.	Total 1,383
Number of women	13	98	159	173	123	491	249	73	4	

II.—Difficult Labour.

In this division which represents labour in which the head, face or brow presented and labour lasted more than 24 hours or required artificial assistance, there were 178 cases, an increase of 47 compared with the previous year.

(a) *Tedious Labour.*

In 36 cases, the labour was extended over 24 hours and delivery accomplished by natural powers, the delay occurring in these cases chiefly in the first stage of labour; 33 children were born alive, 18 males (4 premature) and 15 females (4 premature) and 3 were born still, 1 male (premature) and 2 females (1 premature).

The mortality in these cases was I—*Vide* Case No. IV.

(b) *Laborious Labour.*

In this class the head presented in 137 and the face in 5, total 142, an increase of 29, compared with last year. The ages, number of pregnancy and duration of labour are noted in the following table :—

Ages of women—Years	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	38	40	Total 142
Number of women	1	6	9	20	10	14	5	6	8	10	9	10	2	4	3	6	1	6	2	3	3	3	1	

Number of pregnancy	1	2	3	4	5	6	7	8	9	11	13	Total 102
Number of women	80	18	10	5	11	6	6	2	2	1	1	

Hours in labour	6 to 12	12 to 18	18 to 24	24 to 36	36 to 48	48 to 60	above 60	Total 142
Number of women	27	37	23	28	6	4	17	

Mode of Delivery.	Number of Cases.	Mothers.		Children alive.		Children still.		Percentage of mortality.	
		Recovered.	Died.	Male.	Female.	Male.	Female.	Mothers.	Children.
Natural powers over 24 hours ...	36	35	1	18	15	1	2	3·2	8·3
Barnes' elastic bags	2	2	...	...	1	1	...	...	50
Forceps	117	111	6	57	44	14	2	5·1	13·6
Version, podalic	1	1	...	...	...	...	1	...	100
Do. do. and forceps ...	3	3	...	...	2	1	...	...	33·3
Do. cephalic and forceps ...	2	2	...	2	...	...	...	...	...
Do. do. and craniotomy ...	1	1	...	...	...	...	1	...	100
Cephalotripsy	12	5	7	...	...	7	5	58·3	100
Cæsarian section for calculus in bladder	1	...	1	...	1	...	...	100	...
Cæsarian section for cicatricial contraction of vagina and cervix ...	1	1	...	...	1	...	...	...	...
Symphysiotomy	1	1	...	...	...	...	1	...	100
Exhaustion—protracted labour ...	1	...	1	Died undelivered.					

The proportion of male to female children delivered artificially is 1·40 males to 1 female.

If preternatural and complex labours and abortions be excluded, the proportion of artificial deliveries is 1 in 11·30 labours, 3·10 per cent. more than in 1893.

Fifteen cases died or 10·63 per cent. against 6·2 per cent. in 1893—*Vide* Cases Nos. V to XIX.

The following table gives a brief analysis of these cases :—

Number of Case.	Number of Pregnancy.	Cause of Difficulty.	Condition on Admission.	Condition of Child on Admission.	Cause of Mother's Death.
V.	Fifth ..	Inertia ..	25 hours in labour; exhaustion present; temperature 100° F., pulse 130; membranes absent; head in pelvic cavity.	Alive ..	Puerperal septicæmia.
VI.	First ..	Impaction of head in pelvic cavity.	24 hours in labour; abdomen tympanitic; membranes absent; liquor amnii decomposed.	Alive ..	Metro-peritonitis.
VII.	First ..	Premature rupture of membranes; rigid cervix.	4 hours in labour; membranes absent; head presenting; cervix admitting one finger.	Alive ..	Puerperal septicæmia.
VIII.	Fifth ..	Impaction of head in pelvic cavity.	17 hours in labour; much exhaustion; cervix fully dilated; membranes absent; soft parts bruised; temperature 100° F., pulse 120.	Alive ..	Puerperal septicæmia.
IX.	First ..	Fourth position.	Exhausted; 30 hours in labour; temperature 98·4° F., pulse 132; soft parts much bruised and swollen.	Still ..	Metro-peritonitis.
X.	First ..	Inertia ..	38 years of age; 12 hours in labour.	Alive ..	Puerperal septicæmia.
XI.	First ..	Impaction of head in pelvic cavity.	Exhausted; temperature 101·2° F.; pulse 156; 48 hours in labour.	Still ..	Puerperal septicæmia.

Number of Case.	Number of Pregnancy.	Cause of Difficulty.	Condition on Admission.	Condition of Child on Admission.	Cause of Mother's Death.
XII.	First ..	Impaction of head in pelvic cavity.	72 hours in labour; much exhausted; temperature 99° F., pulse 100; membranes absent; vulva and soft parts much bruised and swollen; liquor amnii offensive.	Still ..	Puerperal septicæmia.
XIII.	Second ..	Impaction of head in pelvic cavity.	Exhaustion present; 30 hours in labour; temperature 99·2° F.; pulse 120; liquor amnii green and offensive.	Still ..	Exhaustion.
XIV.	First ..	Impaction of head in pelvic cavity.	5 days in labour; exhaustion present; very restless.	Putrid ..	Puerperal septicæmia.
XV.	Second ..	Impaction of head in pelvic brim.	Exhaustion present; 15 hours in labour; temperature 101·6° F., pulse 152.	Still ..	Exhaustion.
XVI.	Third ..	Impaction of head in pelvic cavity.	72 hours in labour; temperature 102° F., pulse 128; membranes absent.	Still ..	Puerperal septicæmia; removed dying.
XVII.	First ..	Impaction of head in brim of pelvis.	72 hours in labour; uterus rigid; temperature 98·8° F.; pulse 120.	Still ..	Exhaustion.
XVIII.	First ..	Impaction of head in pelvic cavity.	30 hours in labour; moribund.	Still ..	Exhaustion; soon after admission; undelivered.
XIX.	First ..	Calculus in bladder.	72 hours in labour; much exhausted; cervix two-fifths dilated; membranes absent; head presented.	Alive ..	Was delivered by cæsarian section; died from peritonitis.

57·14 per cent. of the artificial deliveries were women in their first labours, and 47·14 per cent. occurred in women at or under 20 years of age.

The average duration of labour was 26·2 hours compared with 20·5 hours in 1893; the increase in the number of hours is due to the women remaining longer at home before seeking surgical relief. 14·8 per cent. of the total number were more than 48 hours in labour.

III.—Preternatural Labour.

There were 67 labours in which some other part than the head presented, a decrease of 37 compared with 1893.

Thirty-one of these were uncomplicated and are classified under this head, and the remaining 36 are included under complex labours.

The results of the 31 uncomplicated cases are shown in the following table :—

Presentation.	Number of Cases.	Mothers.		Children.		
		Recovered.	Died.	Alive.	Still.	Decomposed.
Breech	11	11	..	7	4	..
Foot	8	8	..	7	1	..
Arm	6	6	..	1	5	..
Head and arm	3	1	2	..	3	..
Brow and hand	1	1	..	1	..	..
Breech and foot	2	2	..	1	1	..
Total ..	31	29	2	17	14	..

The results of the 36 cases included under complex labours are shown below :—

—	Number of Cases.	Mothers.		Children.		
		Recovered.	Died.	Alive.	Still.	Decomposed.
Breech	10	9	1	2	3	2
Foot	11	11	..	7	3	1
Arm	7	7	..	..	6	1
Head and arm	4	3	1	2	2	..
Head and foot	1	1	..	1	..	..
Hand and foot	1	1	..	..	1	..
Breech and hand	1	1	..	1	..	..
Face and arm	1	1	..	..	1	..

Delivery took place in the uncomplicated cases by natural powers in 17 instances, viz. :—

Breech	9	
Foot	6	
Arm	1	(spontaneous evolution).
Compound	1	(breech and foot).

Delivery was terminated artificially in 14 instances, viz. :—

Breech	2	Extraction (1 terminated by forceps).
Foot	2	Extraction (1 terminated by forceps, the other by cephalotripsy).
Arm	5	1 by decapitation, 4 by podalic version (1 of which was terminated by cephalotripsy).
Compound	5	Version, podalic, 2 (1 terminated by forceps); cephalic version and forceps 1, extraction and cephalotripsy 1, cephalotripsy 1.

Mortality of mothers 2—*Vide* Cases Nos. XX and XXI.

In the uncomplicated cases in inverted labours (breech and foot) 73·6 per cent. of the children were born alive; in transverse labour only 1 child out of 6 was born alive, the remaining 5 were all known to be dead on admission; in compound presentation 33·3 per cent. of the children were born alive.

The ages, number of the pregnancy and duration of labour in the uncomplicated cases are shown in the following table :—

Ages of women—years ...	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	32	35	37	38	Total 31.
Number of women	3	1	2	1	3	1	1	1	4	2	1	1	2	2	2	1	1	1	1	

Number of pregnancy	1	2	3	4	5	6	7	8	10	Total 31.
Number of women	9	4	5	...	8	3	1	...	1	

Hours in labour ...	3 to 4	4 to 5	5 to 6	6 to 12	12 to 18	18 to 24	24 to 36	36 to 48	above 48	Total 31.
Number of women.	3	3	1	6	11	3	3	...	1	

IV.—Complex Labours.

Labour complicated with some accidental occurrence involving danger to mother or child; of these there were 284 cases, a decrease of 9 compared with 1893. They are thus classified :—

Plural births	29
Hæmorrhage	67
Retained placenta	15
Puerperal convulsions	25
Rupture of uterus or vagina	4
Descent of funis	21
Other complications	122
Total ..	283

16

(a) *Plural Births.*

Twenty-eight women were delivered of twins and 1 of triplets; 47 children were born alive (23 males and 24 females) and 10 were born still (5 males and 5 females). One woman died undelivered from puerperal convulsions. Two cases of twins are returned under abortion. Plural births occurred once in 63·8 labours. With regard to sex, 28 were males and 29 females. In 9 instances the children were both males, in 10 both females, and in 8 male and female; in the case of triplets, 2 were males and 1 female. The presentation in these cases were as follows:—

Double crainal.	Head and breech.	Head and feet.	Head and head and arm.	Head and head and funis.	Head and breech and hand.	Head and breech and feet.	Breech and foot.	Breech and head.	Feet and funis and head	Feet and head.	Total.
-14	3	1	4	1	1	1	1	1	1	1	29

In 7 instances artificial delivery was resorted to, viz.:—

Forceps	3
Version	1
Do. cephalic and forceps	1
Extraction	2
Total	7

Mortality of mothers 5—*Vide* Cases Nos. XXII to XXVI.

(b) *Hæmorrhage.*

Sixty-seven cases are recorded, of which 8 died.

The cases are thus classified:—

Accidental hæmorrhage	9
Placenta prævia	14
Post-partum hæmorrhage	44
Total	67

Accidental Hæmorrhage.—Eleven cases are reported. Two cases are returned, 1 under twins, and 1 under puerperal convulsions. Two children were born alive and 6 still, including 1 decomposed. The latter were all known to be dead on admission.

The mode of delivery was—

Natural powers	8
Forceps	4
Cephalotripsy (after version)	1
Total	8 and 1 died undelivered.

Mortality of mothers 2—*Vide* Cases Nos. XXVII and XXVIII.

Placenta Prævia.—Fourteen cases are recorded, of which 3 died—*Vide* Cases Nos. XXIX to XXXI.

The cases were delivered by—

Natural powers	7
Version, podalic	4 (1 after cephalotripsy).
Forceps	2
Total	13 and 1 died undelivered.

As regards the presentation the head presented in all.

Post-partum Hæmorrhage.—Fifty cases are recorded, 6 of these are included under other labours, viz.:—

Twins	1
Bi-lobed uterus	1
Morbid adhesion of placenta	2
Anæmia	1
Syphilis	1
Total	6

Of the 44 cases, in 31 instances the loss of blood was trivial, and did not, in any way, affect the convalescence of the mother. In 10 instances the loss was sufficient to affect the mother's pulse, and in 4 the loss of blood was very serious.

The mode of delivery in these cases was—

Natural powers	42
Forceps	1
Extraction and cephalotripsy	1
Total	44

The mortality of mothers was 3—*Vide* Cases Nos. XXXII to XXXIV.

(c) *Retained Placenta.*

Fifteen cases are recorded, in which the complication occurred. In 4 other cases (1 of twins and 3 of post-partum hæmorrhage) the placenta was also retained. Of the 15 cases 10 were cases of simple retention, and in 5 there was morbid adhesion. Four of the women were confined at their own houses, and brought in with the after-birth retained.

Mortality of mothers 2—*Vide* Cases Nos. XXXV and XXXVI.

(d) *Puerperal Convulsions.*

There were 30 cases of puerperal convulsions, 2 of these are recorded under abortion, 1 under albuminuria and anasarca, and 2 under twins. Delivery was effected in the 25 cases by—

Natural powers	8
Do. do. and Barnes' bags	1
Forceps	12
Cephalotripsy	2
Total	23 and 2 died undelivered.

The following table shows the ages of the women and number of pregnancy in these cases:—

Ages of women—years	13	14	15	16	17	18	19	20	24	25	27	30	31	32	Total 25.
Number of women	1	1	1	2	2	3	2	6	2	1	1	1	1	1	
Number of pregnancy							1	2	3	4	6	7			Total 25.
Number of women							19	1	2	1	1	1			

76 per cent. of the number were women in their first labours as against 79·3 per cent. in 1893 and 80 per cent. in 1892.

Mortality of mothers 6—*Vide* Cases Nos. XXXIX to XLIV or 20 per cent.; this is 20 per cent. less than the average mortality of this complication taking a large series of years, and 15·5 per cent. less than the mortality of the previous year.

(e) *Rupture of the Uterus or Vagina.*

Four cases are recorded, 2 of laceration of the vagina, and 2 of rupture of the vagina. The ages, number of the pregnancy and duration of labour are shown in the following table:—

Ages of women—years	19	20	26	28	Total 4.
Number of women	1	1	1	1	
Number of pregnancy		2	5	6	Total 4.
Number of women		2	1	1	
Hours in labour	12	23	24	72	Total 4.
Number of women	1	1	1	1	

The presenting part in these cases was—

Head	2
Face and arm	1
Shoulder	1
Total	4

The mode of delivery was—

Cephalotripsy	2 (1 followed by gastrotomy.)
Podalic version	2
Total	4

Mortality of mothers 2. For fatal cases—*Vide* Cases Nos. XXXVII and XXXVIII.

(f) *Prolapse of the Funis.*

This complication occurred in 22 instances, 1 of these is included under other complications. Delivery was effected in the following manner in the 21 uncomplicated cases :—

Natural powers	7
Forceps	1
Version, podalic	3
Do. do. and forceps	2
Do. cephalic and forceps	1
Extraction	2
Cephalotripsy	2
Decapitation	3
Total	21

The presentation and results to children are shown in the following table :—

Presentation.	Number of Cases.	Children.		
		Alive.	Still.	Decomposed.
With head	8	5	3	..
Do. do. and arm	2	..	2	..
Do. arm	5	..	5	..
Do. head and foot	1	..	1	..
Do. do. hand and foot	1	..	1	..
Do. breech	1	..	1	..
Do. feet	3	2	1	..

Mortality of mothers—*Nil.*

(g) *Other Complications.*

There were 123 other complications with 10 deaths (*vide* table) compared with 135 other complications and 25 deaths in 1893 :—

Broncho-pneumonia	1
Dysentery	3
Heart disease	1
Privation	1
Pneumonia	1
Prolapse of uterus (exhaustion)	1
Remittent fever	2
Total	10

Vide Cases Nos. XLV to LIV.

ABORTIONS.

In these deliveries the duration of the pregnancy was calculated to be less than 28 weeks, and the weight of the child less than 2 lb.

One-hundred and five cases are recorded compared with 77 in 1893 and 58 in 1892. The deaths were 13 against 3 in the previous year. The increase is remarkable and tends to prove that the health of the women was not so good this year. The cause may be due to the high price of food-stuffs leading to a general deterioration of the health of the pregnant woman. Thirteen cases died, viz. :—

Albuminuria and anasarca	1
Dysentery	4
Heart disease	1
Puerperal convulsions	1
Putrid fœtus, septicæmia	3
Retained placenta septicæmia	1
Pneumonia	1
Peritonitis before admission	1
Total	13

Vide Cases Nos. LV to LXVII.

DEATHS.

The causes of deaths are classified under the following headings :—

I.—*Accidents of child-birth.*
II.—*Puerperal causes.*
III.—*Non-puerperal causes.*

I.—*Accidents of child-birth.*

Placenta prævia	3
Accidental hæmorrhage	3
Post-partum hæmorrhage	2
Rupture of vagina	2
Puerperal convulsions	8
Exhaustion	6
Total	24

II.—*Puerperal Causes.*

Puerperal septicæmia	19
Metro-peritonitis	5
Total	24

III.—*Non-puerperal Causes.*

Albuminuria and anasarca	1
Anæmia and anasarca	1
Dysentery	6
Heart disease	2
Pneumonia	4
Peritonitis before delivery	1
Privation	1
Pleurisy	1
Remittent fever	2
Total	19
Grand Total	67

The following table shows the classes of labour in which the 67 deaths fall :—

I. Natural labours			3
		Total	3
II. Difficult	Tedious labour		1
	Forceps		6
	Cephalotripsy		7
	Cæsarian section for calculus in bladder		1
	Exhaustion—protracted labour		1
	Total		16
III. Preternatural	Compound		2
	Total		2
IV. Complex			5
	Plural births		2
	Accidental hæmorrhage		3
	Placenta prævia		3
	Post-partum hæmorrhage		2
	Retained placenta		6
	Puerperal convulsions		2
	Rupture of the vagina		10
	Other complications		
	Total		33
Abortion	Albuminuria and anasarca		1
	Dysentery		4
	Heart disease		1
	Pneumonia		1
	Putrid fœtus		1
	Peritonitis before delivery		1
	Retained placenta		3
	Puerperal convulsions		1
	Total		13
	Grand Total		67

There were 67 deaths, of these 9 died undelivered, the remaining 59 cases show a mortality, 3·04 per cent.—a slightly lower rate than in 1893. Three deaths occurred among natural labours, 1 was due to pleurisy, the others to septic infection. The very high percentage of deaths in difficult labour among women delivered by cephalotripsy; 58· per cent. against 28·56 in the previous year was due to the protracted labour, and to the exhausted condition of the patients; several were really moribund by the time the operation was concluded. Of the 1,980 labours, 1,580 are classed as *out-cases*, that is, cases which were admitted in labour, and 400 as *in-cases*, that is, cases kept under observation, more or less, before delivery. The average time of observation during the year has been 41·7 days. Among the *out*-cases 64 deaths occurred or 4·05 per cent. Among the *in*-cases 3 deaths occurred or ·75 per cent.

PUERPERAL SEPTICÆMIA.

The following table shows the number of deliveries in each month throughout the year and the cases of puerperal sapræmia or septicæmia which occurred in each block :—

Months.	Number of deliveries.	Blocks in which cases occurred.	Total in each month.	Remarks.
January	174	E 2 .. 1 D 2 .. 2 Cot. and A 2 .. 3	6	2 were cases of natural labour with retained clots and decidual threads: both recovered. 1 was a case of difficult labour (forceps delivery): recovered. 2 were cases of complex labour (retained placenta) syphilis, macerated fœtus 1: both recovered; and 1 was a case of abortion with retained placenta: recovered.
February	131	A 2 .. 2 D 2 .. 4 E 2 .. 2	8	1 case of natural labour (retained decidual shreds): recovered. 4 cases of difficult labour (forceps delivery): recovered. 1 case of preternatural labour (arm presentation, decapitation): recovered. 2 complex labours, 1 of syphilis (retained clots): recovered. 1 a case of retained placenta; delivered outside: *died* of metro-peritonitis.
March	154	A 1 .. 1 A 2 .. 1 D 2 .. 1 E 2 .. 1	4	1 tedious labour: *died*. 2 difficult labours (forceps delivery): recovered. 1 protracted labour (forceps delivery): *died*.
April	145	Cottage 4 D 2 .. 1 E 2 .. 1	6	3 protracted labour (forceps delivery): all *died*. 1 forceps delivery: recovered. 1 retained placenta: recovered. 1 twins, 1 child born outside: recovered.
May	140	N.C.W. 1 A 2 .. 1 E 1 .. 1	3	1 breech presentation, extraction and cephalotripsy, post-partum hæmorrhage: *died* of metro-peritonitis. 1 abortion (retained placenta): recovered. 1 abortion, 1 putrid fœtus septicæmia: *died*.
June	158	Cottage 2 N.C.W. 2 B 2 .. 1 E 2 .. 2	7	1 case of difficult labour (forceps): recovered. 1 difficult labour (cephalotripsy): removed dying. 1 difficult labour (face: forceps): recovered. 1 anæmia, sapræmia: recovered. 1 abortion (retained placenta): recovered. 1 of dysentery (forceps): recovered. 1 of macerated fœtus: recovered.
July	181	Cottage 2 E 2 .. 1	3	1 case of difficult labour (forceps, metro-peritonitis): *died*. 1 of difficult labour (forceps delivery): recovered. 1 of prolapse of uterus, (forceps): recovered.
August	184	E 2 .. 1 N.C.W. 1 A 1 .. 1 Cottage 4	7	1 case of natural labour (retained decidual): *died*. 1 case of difficult labour, protracted (delivered by cephalotripsy): *died*. 1 case of complex labour (morbid adhesion of placenta): *died*. 1 case of puerperal convulsions (delivered by cephalotripsy): recovered. 1 case of abortion (retained placenta): *died*. 1 case of triplets: *died*.
September ..	202	E 2 .. 2 N.C.W. 2 D 1 .. 1 D 2 .. 1 Cottage 1	7	2 cases of natural labour: 1 recovered, 1 *died*. 1 case of tedious labour: recovered. 1 case of difficult labour (forceps): *died*. 1 case of complex labour (post-partum hæmorrhage): recovered. 2 cases of abortion (retained placenta): both *died*.
October	187 ..	*Nil.*	..	
November	173	A 1 .. 1 Cottage 3 N.C.W. 1 B 2 .. 1 E 2 .. 1 A 1 .. 1	8	1 case of complex labour (macerated fœtus) (head): recovered. 1 case of dysentery: *died*. 1 case of difficult labour (cephalotripsy): *died*. 1 case of abortion (albuminuria and anasarca): recovered. 1 case of puerperal convulsions: recovered. 1 case of difficult labour (cephalotripsy): *died*. 1 case of bronchopneumonia: *died*. 1 case of natural labour: recovered.
December	151	E 2 .. 2 N.C.W. 2	4	1 case of natural labour: recovered. 2 cases of protracted labour: recovered. 1 case of puerperal convulsions; *died*.
Total ..	1,980	..	63	

CHILDREN.

The produce of 1,863 deliveries (excluding 105 abortions and 7 cases which died undelivered at full term) was 1,897 children, there being 27 twin-births and 1 triplet. Of these 1,503 were delivered at about full term, 350 were premature and 44 had undergone intra-uterine maceration or become putrid.

Sex.—1,015 were males and 882 were females, a proportion of 1·15 males to 1 female.

Live and Still-births.—1,715 children were born alive and 182 still, including the 44 decomposed children.

The ratio of live-births was 90·3.

The ratio of still-births, excluding the decomposed children, was 7·4.

The sex of the still and decomposed children are shown in the following table :—

Class.	Number of Cases.	Still.		Decomposed.		Total.
		Males.	Females.	Males.	Females.	
Natural labours	1,383	17	11	..	..	
Difficult labours	177	23	11	1	1	
Preternatural labours ..	31	9	5	..	..	
Complex labours	284	37	23	23	19	
Total ..	1,875	86	50	24	20	

It will be seen that there were 110 still males to 70 still females.

Deaths of Children in Hospital.

During the year 65 children have died within the first ten days. The following were the causes of deaths reported in these cases :—

Athrepsia	2
Atelectasis	8
Absence of rectum (colotomy)	1
Infantile convulsions	9
Intra-uterine peritonitis	1
Obstruction of bowels	1
Premature births	33
Do. do. and atelectasis	3
Trismus neonatorum	7
Total ..	65 in 1,715 children — or 3·7 per cent.

This result is better than that of 1893, when it was 4·3 per cent.

The following cases of ophthalmia neonatorum occurred during the year :—

Months.	Number of deliveries.	Blocks in which cases occurred.	Total in each month.	Remarks.
January	174	D 2 .. 2 B 2 .. 1	3	Right eye in 2; both eyes 1; average duration of disease, 3 days, all recovered.
February	131	B 2 .. 2 D 2 .. 4 E 2 .. 1	7	Both eyes in 4; right in 1; left in 2; all recovered; average duration of disease 5¼ days. Cause: unknown.
March	154	D 2 .. 2 A 1 .. 1	3	Both eyes in 2; left eye in 1; all recovered; average duration of disease 5 days. Cause: unknown.
April	145	A 1 .. 1 B 1 .. 1 Cottage 1	3	Both eyes in 2; left eye in 1; all recovered. Cause: unknown.
May	140	B 1 .. 1	1	Right eye; recovered in 6 days.
June	158	*Nil.*	..	
July	181	*Nil.*	..	

Months.	Number of deliveries.	Blocks in which cases occurred.	Total in each month.	Remarks.
August	184	B 1 .. 1	1	Right eye; recovered in 5 days.
September ..	202	N.C.W. 1 E 2 .. 2	3	Left eye in 2; both recovered in 6 days; right eye 1; child was delivered by forceps, and the eye was injured by pressure of the forceps; a corneal ulcer occurred, and the child was sent to the Ophthalmic Hospital on the twentieth day.
October	187	*Nil.*	..	
November ..	173	*Nil.*	..	
December	151	*Nil.*	..	
Total ..	..	..	21	Cases or 1·2 per cent. of live births.

OBSTETRIC OPERATIONS.

Two hundred and thirty-two women were assisted in their labours, *i.e.*, 1 in 8·6 labours against 1 in 9·00 in 1893.

Acceleration of Labour.—Labour was accelerated by Barnes' elastic bags in 13 instances. Two were difficult labours and were delivered without further assistance, 11 were cases of complex labours, 1 was delivered without further aid, viz., puerperal convulsions, and 9 were aided in their labours, viz., forceps 5 (accidental hæmorrhage 1, placenta prævia 1, and puerperal convulsions 3), by version 3 (placenta prævia 2, dysentery 1), and by cephalotripsy 2 (puerperal, convulsions 1 and prolapse of uterus 1).

Mortality of mothers 1—*Vide* Case No. XL.

The forceps was employed in 161 instances 1 in 11·5 cases. The following table shows the classes of labour and the results to mothers and children:—

Classes.	Number of cases.	Mothers died.	Children.	
			Alive.	Still.
Difficult	122	6	105	17
Preternatural	4	1	2	2
Complex	35	4	19	16
Total ..	161	11	126	35

For fatal cases—*Vide* Nos. V to X, XX, XXXI, XXXIX, XLII and XLVI.

The following table shows the result obtained in comparison with previous years:—

—	1890.	1891.	1892.	1893.	1894.
Proportion of cases in which the forceps was used	1 in 13·7	1 in 14·5	1 in 14·7	1 in 16·6	1 in 11·5
Proportion of still-births in these cases..	1 in 5·2	1 in 5	1 in 4·09	1 in 5	1 in 4·6
Percentage of live-births, taking all cases in the year	91·9	95	94·4	93·5	90·3

Version was performed in 31 instances, 25 podalic and 6 cephalic. In the cephalic versions, 3 were face presentations, 2 were terminated by forceps, and 1 by cephalotripsy, 2 were head and hand presentation; both terminated by forceps, and 1 head, hand, and funis also terminated by forceps.

Of the 25 podalic versions 4 were cases of difficult labour, in 3 of which delivery was terminated by forceps; 6 were cases of preternatural labour, 1 terminated by forceps and 1 by cephalotripsy; 15 were complex labours, viz.:—twins 1, placenta prævia 4, descent of the funis 5,

(2 terminated by forceps); laceration or rupture of vagina 2, other complications 3. The character of the labour and results are shown below:—

Class of Labours.	Number of Cases.	Terminated by Forceps.	Terminated by Craniotomy.	Mothers.		Children.	
				Recovered.	Died.	Alive.	Still.
Difficult	4	3	..	4	..	2	2
Preternatural	6	1	1	6	..	2	4
Twins	1	..	..	1	..	1	..
Placenta prævia	4	..	..	3	1	2	2
Descent of funis	5	2	..	5	..	2	3
Rupture of vagina	2	..	..	1	1	..	2
Other complications	3	..	..	2	1	..	3
Total ..	25	6	1	22	3	9	16

Mortality of mothers 3—*Vide* Cases Nos. XXIX, XXXVIII and XLVII.

Extraction was performed in 12 instances, viz., preternatural labours 5 (breech 2, feet 2, compound 1), in 2 of which delivery was terminated by forceps and 2 by craniotomy; complex labours 7, viz., twins 2, post-partum hæmorrhage 1 (breech terminated by cephalotripsy), descent of funis 2, and macerated fœtus 2 (1 terminated by cephalotripsy).

Mortality of mothers 1—*Vide* Case No. XXXII.

Craniotomy or Cephalotripsy was performed in 27 instances. In 13 the labour was difficult, the head presented in 12, and the face in 1. In 5 of the former the forceps had failed to deliver. In 4 the labour was preternatural (feet 1, arm 1, compound 2), and in 10 the labour was complex, viz., accidental hæmorrhage 1, post-partum hæmorrhage after extraction 1, puerperal convulsions 2, descent of the funis 2, rupture of uterus or vagina 2, prolapse of uterus 1, and macerated fœtus 1.

Mortality of mothers 14—*Vide* Cases Nos. XI to XVIII, XXI, XXVIII, XXXII, XXXVII, XL, and LII.

Decapitation was performed in 4 instances, viz., preternatural labour (arm) 1, and complex (arm and funis) 3.

Mortality of mothers—*Nil.*

Induction of premature labour and *abortion* was practised in 9 instances, viz.:—

Complex labour	Anæmia	2	
	Dysentery	1	
	Heart disease	1	
	Syphilis	1	
	Macerated fœtus	1	
	Total ..	6	
Abortion	Dysentery	1	
	Heart disease	1	
	Retroflexion	1	
	Total ..	3	

Mortality of mothers 1—*Vide* Case No. XLVIII.

Symphysiotomy was performed in 1 instance for extreme degree of contraction of the pelvis, forceps failing to deliver; the child was lost, but the mother recovered.

Cæsarian section was performed in 2 instances, 1 for cicatricial contraction of cervix and vagina, and in 1 case of calculus in bladder.

Mortality of mothers 1—*Vide* Case No. XIX.

Laparotomy was performed in 1 instance of ruptured uterus and vagina after delivery by cephalotripsy. The woman died—*Vide* Case No. XXXVII.

Delivery by *spontaneous evolution* occurred in 1 case of preternatural labour (arm presentation).

REPORT ON GYNÆCOLOGICAL CASES AND DISEASES OF PREGNANCY.

In addition to confinement cases, 862 cases of diseases of pregnancy and 545 cases of gynæcological diseases have been treated as in-patients during the year; 2,231 cases of gynæcological affections were also treated as out-patients at the Egmore Female Dispensary for Women and Children, where a total number of 13,390 patients were treated during the year.

During the year 7 women were treated for uterine fibroids by Apostoli's method. The ages varied from 21 to 38 years, and the number of sittings from 7 to 20. The symptom which made the patients seek relief was, in every case, hæmorrhage. In no case was puncture of the

tumour made, but a blunt-pointed sound was passed into the uterus. Several of the patients left the hospital well pleased with the result of the treatment; but I regret that I cannot endorse their opinion. In each case, besides the electrical treatment, the patients were more or less confined to bed and treated with ergot, cannabis indica and bromide of potassium. There was no apparent reduction in the size of any of the tumours, and the hæmorrhage appeared to me as free after the treatment as before. Apostoli's treatment, moreover, is not devoid of danger: in one case at least peritonitis was set up.

The following table shows the diseases for which the in-patients have been treated:—

Diseases of Pregnancy.

Nature of Disease.	Number treated.	Number died.
Abscess, gluteal	2	..
Do. mammary	6	..
Albuminuria	6	..
Do. and anasarca	11	..
Anæmia	7	..
Do. and anasarca	9	..
Asthma	4	..
Bronchial catarrh	9	..
Bronchitis	20	1
Broncho-pneumonia	2	1
Colic	1	..
Cystitis	2	..
Displacement of gravid uterus. Anteversion	1	..
Displacement of gravid uterus. Prolapse	1	..
Displacement of gravid uterus. Retroversion	8	..
Diarrhœa	3	..
Dyspepsia	2	..
Dysentery	40	..
Debility	1	..
Enlarged inguinal gland	1	..
Erysipelas	1	..
Excessive liquor amnii	2	..
Gum boil	1	..
Hæmorrhoids	1	..
Heart disease	4	..
Influenza	1	..
Intermittent fever	20	..
Leucorrhœa	1	..
Lymphangitis	1	..
Macerated fœtus	2	..
Malarial fever	8	..
Observation (cases awaiting confinement)	290	..
Ophthalmia, catarrhal	2	..
Phthisis pulmonalis	1	..
Placenta prævia	1	..
Pneumonia	5	2
Privation	8	..
Puerperal convulsions	2	..
Remittent fever	1	..
Retention of urine	13	..
Rheumatism, chronic	3	..
Ring-worm	2	..
Splenic tumour	1	..
Stomatitis	2	..
Syphilis, primary	3	..
Do. secondary	9	..
Threatening abortion	41	..
Do. premature labour	40	..
Do. labour	243	..
Ulcer leg	3	..
Vaginitis, simple	1	..
Vomiting of pregnancy	4	..
Varicella	1	..
Worms	3	..
Wound leg	4	..
Do. posterior vaginal wall	1	..
Total ..	862	4

Cases treated in the Gynæcological Wards, 1894.

Nature of Case.	Disease or Condition.	Number treated.	Number died.
Malformation of organs	Stenosis cervical canal	11	..
	Malformation of vagina	2	..
	Total ..	13	..
Displacement of uterus	Anteflexion	22	..
	Prolapse	40	..
	Retroversion	52	..
	Retroflexion	24	..
	Total ..	138	..
Hyperplasia and atrophy of uterus.	Areolar hyperplasia	2	..
	Sub-involution	8	..
	Super-involution	3	..
	Total ..	13	..
Hyperæmia and inflammation of uterus, &c.	Chronic metritis	3	..
	Endometritis	23	1
	Syphilitic ulceration of cervix	2	..
	Laceration of cervix	12	..
	Hypertrophy of cervix	1	..
	Hypertrophic elongation of cervix	5	..
	Total ..	46	1
New growths of uterus.	Carcinoma of uterus	20	..
	Fibroid of uterus	18	..
	Sarcoma of uterus	3	..
	Epithelioma of cervix	1	..
	Polypus cervix uteri	2	..
	Total ..	44	..
Diseases of ovaries	Inflammation	8	..
	Cystic disease and cystoma	23	1
	Encephaloid cancer of ovary	2	..
	Total ..	33	1
Diseases of Fallopian tubes.	Pyosalpinx	1	..
	Salpingitis	1	..
	Total ..	2	..
Diseases of uterine ligaments and adjacent peritoneum and cellular tissue.	Broad ligament cyst	2	1
	Sarcoma of broad ligament	1	1
	Pelvic cellulitis and peritonitis	63	..
	Do. hæmatocele	3	..
	Total ..	69	2
Diseases of vagina and vulva.	Abscess, vulvo-vaginal gland.	2	..
	Cicatricial contraction of vagina	5	1
	Laceration of perineum	17	..
	Papilloma, labium majus	1	..
	Recto-vaginal fistula	2	..
	Syphilitic lupoid ulceration of vulva	13	..
	Vaginismus	4	..
	Vaginitis	18	..
	Vesico-vaginal fistula	43	..
	Warty growths of vulva	1	..
	Total ..	106	1

Cases treated in the Gynæcological Wards, 1894—cont.

Nature of Case.	Disease or Condition.	Number treated.	Number died.
Functional and symptomatic disorders.	Amenorrhœa	7	..
	Dysmenorrhœa	7	..
	Menorrhagia	19	..
	Metrorrhagia	5	..
	Total ..	38	..
Cases not classified ..	Abdominal tumours (not classified)	5	..
	Abscess, pelvic	4	1
	Congenital absence of rectum.	1	1
	Encysted peritoneal dropsy ..	1	..
	Hare-lip	1	..
	Hæmorrhage after abortion ..	1	..
	Hypertrophy of bladder ..	1	..
	Hysteria	5	..
	Malignant disease of liver ..	1	..
	Observation	9	..
	Peritonitis, general	2	2
	Pneumonia	1	1
	Privation	5	1
	Retained products of conception	1	..
	Septicæmia, puerperal ..	2	..
	Sinus, abdominal wall ..	2	..
	Vesical calculus	1	..
	Total ..	43	6
	Grand Total ..	545	15

Operations performed in the Gynæcological Wards of the Government Lying-in Hospital, Madras, 1894.

Number of Case.	Nature of Operation.	Number of Cases.	Results. Cured.	Relieved.	No better.	Died.	Remarks.
	Abdominal Sections (1 *to* 29).						
1–2	Supra-vaginal hysterectomy ..	2	2	..	..	..	
3–16	Ovariotomy	14	14	..	..	..	
17–19	Removal of uterine appendages ..	3	3	..	..	..	
20	Removal of uterine appendages (partial)	1	1	..	..	..	
21	Abdominal section for removal of hydatid cyst of kidney ..	1	1	..	..	..	
22	Abdominal section for removal of extra-uterine gestation cyst tubal, with both ovaries and tubes	1	1	..	..	..	
23	Abdominal section for removal of sarcoma of broad ligament ..	1	..	..	..	1	
24	Abdominal section for removal of broad ligament cyst	1	..	..	..	1	
25	Abdominal section for partial removal of fibrocystic tumour of uterus	1	1	..	..	..	
26	Abdominal section for removal of malignant ovarian tumour, incomplete	1	1	..	..	..	
27	Hysterectomy, combined vaginal and abdominal, incomplete ..	1	1	..	..	..	
28	Abdominal section for encysted dropsy of the peritoneum ..	1	..	..	..	1	
29	Abdominal section for suturing uterus to abdominal wall (hysteropexy)	1	1	..	..	..	

Operations performed in the Gynæcological Wards of the Government Lying-in Hospital, Madras, 1894—cont.

Number of Case.	Nature of Operation.	Number of Cases.	Results. Cured.	Relieved.	No better.	Died.	Remarks.
	Other Operations on the Uterus (30 *to* 117).						
30	Paracentesis abdominis for ovarian cystoma	1	..	1	..	..	
31	Removal of whole uterus through vagina	1	1	..	..	..	
32–35	Removal of cervix uteri infra-vaginal	4	4	..	..	..	
36	Removal of anterior lip of cervix.	1	1	..	..	..	
37, 38	Application of caustic to interior of uterus	2	2	..	..	..	
39–69	Curetting of endometrium ..	31	25	6	..	..	
70	Removal of sarcoma from interior of uterus	1	1	..	..	..	
71, 72	Removal of non-malignant growth from interior of uterus ..	2	2	..	..	..	
73	Removal of retained placental tissue	1	1	..	..	..	
74, 75	Removal of non-malignant growth from cervix uteri	2	2	..	..	..	
76–93	Operation for enlarging os and cervix uteri by incision ..	18	17	1	..	..	
94	Operation for enlarging os and cervix uteri by tent	1	1	..	..	..	
95–107	Operation for enlarging os and cervix uteri by dilatation ..	13	11	2	..	..	
108, 109	Operation for dilatation of cervix uteri and exploring cavity of uterus	2	2	..	..	..	
110	Exploratory incision of cervix uteri for retained menstrual fluid	1	1	..	..	..	
111	Incision into cervix for retained menstrual fluid	1	..	1	..	..	
112–116	Destruction of cancerous ulceration of uterus and vagina by scraping and caustic	5	..	3	..	2	
117	Intraparenchymatous injections of alcohol for carcinoma uteri.	1	..	1	..	..	
	Operations on Peritoneum and Cellular Tissue adjacent to Uterus (118 to 122).						
118–120	Incision and drainage of pelvic abscess	3	3	..	..	..	
121	Incision of pelvic abscess ..	1	..	..	..	1	
122	Incision and drainage of pelvic hæmatocele	1	..	..	..	1	
	Plastic Operations (232 *to* 234).						
123–135	Trachelorraphy	13	12	1	..	..	
136–139	Episiorraphy	4	1	1	2	..	
140, 141	Episiorraphy and anterior and posterior colporraphy	2	2	..	..	..	
142, 143	Anterior colporraphy	2	2	..	..	..	
144, 145	Posterior colporraphy	2	2	..	..	..	
146–152	Colpo perineorraphy	7	7	..	..	..	
153–157	Operation for closing vagina (kolpokliesis)	5	..	3	2	..	
158–162	Recto-vaginal fistula	5	1	3	1	..	4 women: 1 case cured at first operation, and discharged relieved.

Operations performed in the Gynæcological Wards of the Government Lying-in Hospital, Madras, 1894—cont.

Number of Case.	Nature of Operation.	Number of Cases.	Results. Cured.	Relieved.	No better.	Died.	Remarks.
	Plastic Operations—cont.						
163–209	Vesico-vaginal fistula	47	13	20	14	..	29 women: 9 cured at first operation, 3 cured at second operation, 1 cured at third operation; 12 discharged relieved and 4 discharged no better.
210–231	Lacerated perineum	22	18	4	..	..	
232–234	For restoring urethra	3	..	..	3	..	
	Operations about Vulva and lower end of Vagina (235—261).						
235–241	Incision of cicatrices of vagina ..	7	6	1	5	..	
242–244	Operation for enlarging ostium vagina by dilatation	3	2	1	..	..	
245	Operation for enlarging ostium vagina by incision	1	1	..	..	..	
246	Amputation of labia and scraping of lupoid syphilitic ulceration ..	1	..	1	..	..	
247	Amputation of clitoris and scraping of lupoid syphilitic ulceration	1	1	..	..	..	
248–256	Destruction of syphilitic lupoid ulceration of pudendum by scraping	9	5	4	..	..	
257	Removal of papillomatous tumour from labium majus	1	1	..	..	..	
258	Removal of warts of pudendum and scraping	1	1	..	..	..	
259	Destruction of papillomatous growth of vulva by scraping and caustic	1	1	..	..	..	
260, 261	Removal of remains of Hymen and incision of vagina	2	2	..	..	..	
	General Operations (262—272).						
262–264	Colotomy inguinal for congenital absence of rectum, &c. ..	3	1	1	..	1	These operations, though not gynæcological, were performed in women suffering from some gynæcological affection or in the pregnant state or infancy.
265	Removal of breast, left	1	1	..	..	..	
266	Plastic operation for hare-lip ..	1	1	..	..	..	
267	Dilatation of urethra and removal of urinary calculi	1	1	..	..	..	
268	Dilatation of urethra and exploring bladder	1	1	..	..	..	
269	Incision for draining bladder through vagina	1	1	..	..	..	
270, 271	Scraping of scrofulous glands of neck	2	2	..	..	..	
272	Dilatation of stricture of rectum, (rapid dilatation)	1	1	..	..	..	
	Total ..	272	187	55	22	8	

Tabular Statement of Ovariotomies performed in the year 1894.

Number.	Date of operation.	Race.	Age.	Married or single.	General health.	Nature of operation.	Length of incision.	Disease requiring operation and special features.	Parts removed.	Treatment of pedicle.	Drainage tube.	Highest temperature.	Immediate result.	Subsequent history.
			Y.				INCHES.					DEG. FAH.		
1	19th Jan.	Muhammadan.	42	Widow, 3 children.	Weakly, thin and anæmic.	Ovariotomy, right.	3	Parovarian cystoma, right; hæmatoma of parietal and omental adhesions; 22 lb. of dark brown fluid in sac.	Tumour and right ovary.	Silk ligature in 3 sections.	No ...	101 (12th day).	Recovery.	
2	3rd Feb.	Native Christian.	25	Married, 1 child.	Good ...	Ovariotomy, left.	3½	Cystoma of left ovary growing between folds of left broad ligament. Some solid colloid growth; adhesions to descending colon and folds of broad ligament; fluid 5 lb., cyst weight 5 oz.	Tumour and left ovary.	Silk ligature.	Yes, 48 hours.	100·4 (5th day).	Do.	
3	3rd Feb.	Muhammadan.	56	Widow, 5 children.	In weak health from constant pain and fever with rigors.	Ovariotomy, right.	3	Suppurating dermoid ovarian cystoma right; hair, &c., in cyst cavity; fluid 1 lb. fœtid pus; cyst weight 3 oz.; left ovary atrophied.	Tumour and tube.	Do. ...	No ...	103·4 (for a few hours on 2nd day).	Lo.	
4	7th Feb.	Hindu ...	26	Married, 6 children.	Admitted in great pain and symptoms of general acute peritonitis.	Ovariotomy, double.	4	Serous fluid in peritoneum and flakes of lymph over intestines and sac which was covered by omentum and descending colon; axial rotation of pedicle with hæmatoma in broad ligament; small parovarian cyst right side; right ovary cirrhosed; fluid in sac, dark and bloody cyst wall rotten and blood effused and extravasated all through coats; weight of cyst, 2 lb.	Both ovaries and tubes.	Do. ...	Yes, 48 hours.	100·4 (8th day).	Do.	
5	14th Feb.	East Indian.	30	Married, 1 child.	Admitted for chronic pelvio peritonitis with prolapse of uterus.	Removal of uterine appendages.	2½	Chronic pelvio peritonitis with effusion of loculated serum round ovaries; tubes much thickened at fimbriated ends and adherent to ovaries and pelvio structures.	Do.	Do. ...	No ...	102 (11th day).	Do.	

Tabular Statement of Ovariotomies performed in the year 1894—cont.

Number.	Date of operation.	Race.	Age.	Married or single.	General health.	Nature of operation.	Length of incision.	Disease requiring operation and special features.	Parts removed.	Treatment of pedicle.	Drainage tube.	Highest temperature.	Immediate result.	Subsequent history.
			Y.				INCHES.					DEG. FAH.		
6	3rd Feb. ...	Hindu ...	22	Married, 1 child.	Cachectic; circumference of abdomen 31½ inches; has suffered from fever and diarrhœa for past month.	Ovariotomy, right.	5	Encephaloid cancer of right ovary with ascites; peritoneum rough and of a plum colour; omental adhesions to tumour; ascitic fluid 15 lb.; weight of tumour 4½ lb.	Tumour with right tube.	Silk ligature in three sections.	Yes, 48 hours.	101·8	Recovery.	
7	16th March.	Native Christian.	18	Unmarried.	Fair; circumference of abdomen 29½ inches.	Ovariotomy, left.	4	Multilocular colloid ovarian cystoma of left ovary; omental adhesions; fluid 4½ lb.; cyst weight 2½ lb.	Tumour with left ovary and tube.	Silk ligature.	No ...	100 (1st day).	Do.	
8	14th April.	Hindu ...	21	Married, 2 children.	Weak and anæmic from fever and constant pain.	Removal of uterine appendages and extra-uterine gestation cyst tubal.	3½	The tumour which had a sausage shape and measured 5½ inches in length and 7½ inches in circumference was the right tube expanded and containing an extra uterine cyst placenta and old blood clot. The cyst which occupied one-third of the length of the tumour contained a dead shrivelled 3 months' fœtus attached by its cord to the placenta. The fœtus measured 5½ inches in length. A little less than two-thirds of the length of the tube was occupied by old blood clot. Right ovary fairly healthy, left ovary cystic and left tube inflamed. Adhesions of the tumour to intestines and to uterus and firmly fixed down in Douglas' pouch.	Both ovaries and tubes with extra uterine gestation cyst in right Fallopian tube.	Do. ...	No ...	101 3rd and 7th day).	Do. ...	Seen 10 months after. Is fat and in excellent health.
9	23rd June...	Native Christian.	29	Married, 3 children.	In bad health, from constant pain, worse at the menstrual periods.	Removal of uterine appendages partial.	3¼	Right tube inflamed and has the appearance of small intestine, walls thickened and constricted in two places; pus in tube; right ovary apparently healthy; adhesions deep down in pelvis and to sides of pelvic wall; left tube matted down and lying adherent to posterior wall of uterus.	Right tube and ovary.	Silk ligature in three sections.	No ...	102·4 (14th day).	Do. ...	Seen 2 months after operation; is keeping very well and is in better condition.
10	3rd July ...	Native Christian.	28	Married, 2 children.	Fair ...	Ovariotomy, double.	3	Cyst of left ovary, size of a hen's egg; left tube thickened and inflamed and containing a watery fluid; right tube also inflamed and as thick as the little finger; right ovary cirrhosed.	Both tubes and ovary.	Silk ligature	No ...	100 (1st day).	Do.	
11	4th Aug. ...	Pariah ...	22	Married, 0 children.	Is very thin and weak.	Ovariotomy, right.	4	Right ovarian cystoma, multilocular, size of a hen's egg; tumour enucleated with considerable difficulty being intimately attached to broad ligament.	Tumour and right ovary.	Do. ...	No ...	99·6 (2nd day).	Do.	
12	4th Aug. ...	Brahman.	16	Married, 0 children.	Good. Is very hysterical.	Ovariotomy, double.	3½	One large cyst of right ovary, size of an orange; several smaller cysts in structure of ovary; left ovary cystic; left tube thickened and inflamed.	Tumour and right tube and ovary; left tube and ovary.	Do. ...	No ...	99·8 (4th day).	Do. ...	Is keeping good health.
13	18th Aug. ...	East Indian.	48	Married, 8 children.	Emaciated and anæmic; suffers from chronic bronchitis.	Ovariotomy, right.	3	Multilocular ovarian cystoma with colloid contents growing from right ovary; size of tumour about that of a fœtal head at term; no adhesions.	Tumour and right ovary.	Do. ...	No ...	100·4 (6th day).	Do.	
14	21st Aug. ...	Hindu ...	35	Married, 2 children.	Weak and thin; circumference of abdomen 31½ inches.	Ovariotomy, double.	6	Large dermoid cyst of right ovary; contents yellow fluid, cheesy material mixed with sebaceous matter; hair and round masses of cartilage; plates of bone were also found in the cyst wall; pedicle broad and very vascular; adhesions to omentum; left tube thickened and ovary cystic; weight of cyst 3 lb. 6 oz.	Tumour and right ovary; left tube and ovary.	Silk ligature in three section to pedicle of tumour.	No ...	101·4 (4th day).	Do.	

Tabular Statement of Ovariotomies performed in the year 1894—cont.

Number.	Date of operation.	Race.	Age.	Married or single.	General health.	Nature of operation.	Length of incision.	Disease requiring operation and special features.	Parts removed.	Treatment of pedicle.	Drainage tube.	Highest temperature.	Immediate result.	Subsequent history.
			Y.				INCHES.					DEG. FAH.		
15	21st Aug. ...	Hindu ...	22	Married, 1 child.	Fair; admitted for prolapse of uterus and pain in lower abdomen.	Removal of uterine appendages.	3	Right tube much thickened and inflamed and containing pus; right ovary cystic; left tube also much inflamed and hypertrophied, but no pus; left ovary also cystic; ovaries and tubes matted together and enucleated with difficulty.	Both tubes and ovaries.	Silk ligature.	No ...	99·8 (7th day).	Recovery.	
16	8th Sept. ...	Pariah ...	26	Married, 5 children.	Fair; is three months pregnant.	Ovariotomy, right.	3	Cyst of right ovary about the size of a walnut; contents serous; several smaller cysts in ovary; a good deal of ovarian tissue left with a well-marked corpus luteum of pregnancy.	Right ovary and tube.	Do. ...	No ...	100·4 (5th day).	Do.	
17	18th Sept....	Native Christian.	31	Married, 7 children.	General condition fair; circumference of abdomen 39½ inches.	Ovariotomy, double.	4½	Large multilocular cystoma of left ovary; grumous colloid material in the main cyst, the smaller cyst contained clear fluid; a large amount of solid matter at the upper part of tumour; fluid 28 lb., weight of cyst 3 lb. 10 oz.; omental adhesions; right ovary cystic.	Tumour and both ovaries.	Do. ...	No ...	100·4 (5th day).	Do.	
18	27th Nov. ..	Pariah ..	25	Married, 0 children.	Weak and thin.	Ovariotomy, right.	4	Large colloid cystoma of right ovary; contents thick and viscid and evacuated with considerable difficulty; had to be removed partly with a spoon but chiefly with the hand; weight of tumour and contents; 3 lb. 14 oz.	Tumour and right ovary.	Do. ...	No ...	100·4 (1st day).	Do.	
19	14th Dec ...	East Indian.	20	Married, 2 children.	Admitted for chronic pelvic peritonitis with salpingitis from gonorrhœal infection; suffers constant pain, increased at menstrual periods.	Removal of uterine appendages.	2½	Right tube enlarged and inflamed throughout; left tube normal near the uterus but outer two-thirds much dilated and containing some cheesy-looking matter; neither tube contained pus; right ovary had two cysts; tubes and ovaries matted and bound down by extensive adhesions; uterus sharply retroflexed and bound down.	Both ovaries and tubes.	Do. ...	No ...	102 (3rd day).	Do.	

Tabular Statement of Abdominal Sections and Operations involving opening of Peritoneal Cavity in the year 1894.

1	9th May ...	Hindu ...	40	Married, 2 children.	Weak and emaciated; circumference of abdomen 30½ inches.	Abdominal section for removal of sarcomatous tumour of right broad ligament.	5	Large sarcomatous tumour of right broad ligament weighing 11 lb. 9½ oz.; separated from broad ligament with great difficulty; pedicle close to uterus.	Tumour removed.	Silk ligature in three sections.	Yes, 3 days.	101·8 (2nd day).	Died third day; death from shock and peritonitis.	
2	31st Oct. ...	Nativ Christian.	45	Married, 10 children.	In bad health; subject to malarial fever; was tapped 15 days before admission.	Abdominal section for removal of suppurating broad ligament cyst.	5	Suppurating broad ligament cyst. The broad ligament was firmly adherent to the abdominal walls and above to the omentum and at the sides to the pelvis. The cyst was encapsuled by the ligament. The tumour was first tapped and then the cyst wall was separated from the broad ligament folds; no pedicle; fluid 13 lb.; weight of cyst 15 oz.	Do. ...	.....	Yes ...	100·8 (1st day).	Died; death from shock	
1	20th Jan. ...	Muhammadan.	30	Widow, 0 children.	Very weak and very anæmic; from hæmorrhage of long standing.	Supravaginal hysterectomy.	6	Fibro-cystic tumour of uterus; right ovary cystic; size of a turkey egg; left ovary normal in size; no adhesions; tumour weighed after draining 3¾ lb.	Tumour with ovaries and tubes and body of uterus.	Köberle's serre nend and silk ligature to ovarian pedicles.	No ...	101·4 (8th day).	Recovery.	
2	14th Feb. ...	Do. ...	33	Widow, 0 children.	General condition good; fibromyoma size of 5 months gestation.	Do. ...	5½	Quick-growing vascular fibro-myoma of posterior and left wall of uterus; weight after draining 2¾ lb.	Uterus above vaginal junction with tumour and both ovaries and tubes.	Do. ...	No ...	99·8 (12th day).	Do.	

Tabular Statement of Abdominal Sections and Operations involving opening of Peritoneal Cavity in the year 1894—cont.

Number.	Date of operation.	Race.	Age.	Married or single.	General health.	Nature of operation.	Length of incision.	Disease requiring operation and special features.	Parts removed.	Treatment of pedicle.	Drainage tube.	Highest temperature.	Immediate result.	Subsequent history.
						GENERAL OPERATIONS.								
1	9th March...	Hindu ...	Y. 45	Married, 6 children.	Pale and emaciated; circumference of abdomen 37 inches.	Abdominal section for encysted dropsy of peritoneum.	INCHES. 1½	Encysted dropsy of peritoneum; peritoneal membrane thick and fibrous looking, simulating an ovarian cystoma; fluid evacuated and abdominal cavity flushed with warm boiled water.	Fluid evacuated 18 lb.	.....	No ...	DEG. FAH. 101·8 (3rd day).	Died on third day; death from shock and peritonitis.	
2	2nd June ...	Do. ...	30	Widow, 3 children.	Cachectic, with malignant disease of liver.	Hysteropexy.	3	Uterus raised and sutured to abdominal walls with chromic gut.	.....	.....	...	103·4 (8th day).	Recovery ...	Uterus keeps up.
3	2nd Dec. ...	European.	46	Married, 4 children.	Fair; has been losing flesh.	Abdominal section for hydatid cyst of right kidney.	5	Hydatid cyst of right kidney, size of a foetal head at term very intimate adhesions to ascending colon; cyst removed and edges of adventitious cyst stitched to edges of abdominal incision.	Cyst removed ...	.....	Yes ...	100·4 (2nd and 6th day).	Do.	
						INCOMPLETED OPERATIONS.								
1	11th March.	Pariah ...	47	Married, 0 children.	Thin, but healthy looking.	Abdominal section for partial removal of fibro-cystic tumour of uterus.	6	Fibro-cystic tumour of uterus growing from left side of uterus with extensive intestinal and omental adhesions and with left broad ligament encapsuling it; tumour extended deep down into pelvis closely adherent to pelvic walls and rectum.	Portion of tumour lying in abdomen removed, the portion lying in pelvis could not be removed with safety.	Silk ligature in three sections.	Yes, 4 days.	100·8 (7th day).	Recovery ...	Seen 8 months after operation. General health excellent; abdomen is now flat, but has a sinus going down about 4 inches into Douglas's pouch.
2	24th July ...	Hindu ...	40	Married, 3 children.	Cachectic; suffering from carcinoma of uterus.	Hysterectomy (incomplete) combined vaginal and abdominal.	2½	The operation of vaginal hysterectomy was decided on, but after making the usual incisions in the vaginal walls it was found impossible to retrovert the uterus to remove it; the abdomen was therefore opened, the broad ligaments were ligatured, but the uterus was quite fixed from invasion of the disease to the pelvis and could not be removed with safety.	Uterus could not be removed with safety.	Silk ligature	No ...	202° (7th day).	Recovery from operation.	
3	28th Aug ...	Pariah ...	22	Married, 1 child.	Good ...	Exploratory incision.	4	Malignant ovarian tumour with very vascular adhesions which bled on the slightest manipulation; tumour firmly adherent to the sides of the pelvis; intestines adherent to tumour, and tumour lying close on the left common iliac artery.	Could not be removed with safety.	.....	No ...	102° (9th day).	Recovery from operation.	
						REMOVAL OF UTERUS PER VAGINAM.								
1	22nd Dec. ...	Hindu ...	26	Married, 6 children.	Fair ...	Removal of whole uterus per vaginam.	...	Cancer of uterus	Uterus and appendages.	.....	No ...	99·8 (3rd and 4th day).	Recovery ...	Seen three months afterwards. There is a recurrence of the disease in the cicatrix in the vagina.
						CÆSARIAN SECTIONS AND LAPAROTOMY FOR RUPTURE OF VAGINA AND UTERUS.								
1	10th May ...	Muhammadan.	19	Married, II Para.	Admitted in a state of semi-collapse, pulse 140 small and weak; temperature 105° F.	Abdominal section.	8	Cicatricial contraction of ostium vaginæ; vagina dilated by incisions and Barnes' bags and cephalotripsy performed; expression failing to expel the placenta an examination revealed a rent in the vagina and uterus and the placenta lying in the	Placenta and clots.	.....	...	105 on admission.	Died three hours after operation.	

Tabular Statement of Abdominal Sections and Operations involving opening of Peritoneal Cavity in the year 1894—cont.

CÆSARIAN SECTIONS AND LAPAROTOMY FOR RUPTURE OF VAGINA AND UTERUS.—cont.

Number.	Date of operation.	Race.	Age.	Married or single.	General health.	Nature of operation.	Length of incision.	Disease requiring operation and special features.	Parts removed.	Treatment of pedicle.	Drainage tube.	Highest temperature.	Immediate result.	Subsequent history.
			Y.				INCHES.					DEG. FAH.		
2	15th June ..	Hindu ...	34	Married, X Para.	Good ...	Cæsarian section, simple.	5½	abdominal cavity; laparotomy was therefore performed; rent in vagina and uterus sewn up with fine silk. Cigirisial contraction of cervix and vagina the result of her previous delivery, which was effected by craniotomy; tubes ligatured with silk (sterilisation).	Living child ...	.....	...	102·2 (4th day).	Recovery.	
3	20th Sept....	Do. ...	21	Married, I Para.	General health bad; has been suffering from broncho-pneumonia.	Do. ...	6	For vaginal rupture the pubis felt thick and projecting inwards reducing the direct conjugate to less than 2 inches, and there was little room in the transverse diameter; tubes ligatured with silk (sterilisation).	Do.	.....	...	103·6 (4th day).	Died tenth day after operation from peritonitis; on *post-mortem* it was found that the hard tumour behind the symphysis pubis was a vesical calculus; weight 800 grains, length 2 inches, breadth 1¼ inches, thickness 1 inch.	

APPENDIX.

MATERNAL DEATHS, 1894.

CASE I.—*Labour Natural, Pleurisy, Nonseptic.—Mrs. C. J.*, æt. 23 years, East Indian, IV Para. An out-case, admitted 23rd December 1893; said to have been one hour in labour. She is a weak, anæmic and badly nourished woman. Had an abortion in 1892, brought on by an attack of cholera. Is now nine months' pregnant, cervix two-fifths dilated, membranes entire, head presenting. She was delivered by natural powers six hours after admission. There was a good deal of prostration after delivery, and she complained of indefinite pains in different parts of the body; the temperature rose and fell irregularly. On the 4th January symptoms of pleurisy set in; the temperature rose to 103° F.; she grew rapidly worse, and died on the 7th January 1894.

CASE II.—*Labour Natural. Retained Decidua, Curetting of Endometrium, Puerperal Septicæmia.—Chellam*, æt. 18 years, Pariah, I Para. An out-case, admitted 7 a.m., 29th August, in labour with her first child at full term, and was delivered by natural powers on the same day, the third stage being normal. On the third day of delivery the lochia became offensive and the temperature was 101° F. As the lochia continued foul and the temperature kept high, on the fifth day, under chloroform, the uterus was curetted and shreds of membrane removed. The lochia became healthy after this, but the temperature remained high, diarrhœa set in, and she died on the eleventh day of delivery.

CASE III.—*Labour Natural, Puerperal Septicæmia.—Devana*, æt. 27 years, Hindu, V Para. An in-case, admitted 26th September in labour with her fifth child at full term. Was delivered by natural powers an hour after admission, the third stage being normal. She did well up to the sixth day after delivery, when the temperature rose to 104° F., and the lochia were offensive. Every attempt was made to keep the temperature down, but without avail: diarrhœa set in, and she gradually sank and died on the 14th October.

CASE IV.—*Labour Difficult, Tedious, Puerperal Septicæmia.—Poonathoo*, æt. 18 years, Native Christian, I Para. A nervous young girl, was admitted 6 a.m., 16th March, one hour in labour with her first child at full term. Membranes absent, said to have ruptured at the onset of labour, cervix admitted a finger, head presented. The cervix gradually dilated under hot vaginal douches, and she was delivered by natural powers after a labour of twenty-five hours. The soft parts were much bruised, and there was a good deal of nerve shock present after delivery. Soon after delivery the temperature rose to 101° F., several rigors occurred, and the lochia became offensive, the soft parts became sloughy in parts, the temperature continued high, and she gradually became worse and died at 6 p.m., 3rd April.

CASE V.—*Labour Difficult, Laborious, Forceps, Puerperal Septicæmia.—Chinathyee*, æt. 25 years, Hindu, V Para. An out-case, admitted 2 p.m., 14th March, twenty-five hours in labour with her fifth child at full term, membranes absent, said to have ruptured at the onset of labour, uterus rigid, temperature 100° F., pulse weak 130, fœtal heart audible, head in the pelvic cavity with a large scalp tumour, liquor amnii decomposed, soft parts much swollen and bruised by manipulation outside. Delivery was effected easily under chloroform, a live child being extracted by forceps. The soft parts took on an unhealthy action, the lochia became putrid, the temperature rose to 104° F.; she became weaker and died on the 4th April.

CASE VI.—*Labour Difficult, Laborious, Forceps, Metro-peritonitis, Puerperal Septicæmia.—Pentamah*, æt. 24 years, Hindu, I Para. An out-case, admitted 2 p.m., 1st April twenty-four hours in labour with her first child at full term. Uterus acting strongly, fœtal heart faintly audible, abdomen tympanitic at the sides, temperature 101° F., pulse 120, head low down in the pelvis and impacted, large scalp tumour present, liquor amnii decomposed. Under chloroform delivery was effected without much difficulty by forceps, a still male child being extracted. Soon after delivery the temperature rose to 102° F., and on the following day great tenderness over the uterus was present, the lochia were offensive, she became gradually worse and died on the 7th April.

CASE VII.—*Labour Difficult, Laborious, Forceps, Post-partum Hæmorrhage, First Degree, Puerperal Septicæmia.—Andaloo*, æt. 18 years, Hindu, I Para. An out-case, admitted 6 p.m., 12th April, four hours in labour with her first child at full term. Membranes absent, cervix admitted a finger, head presenting. The cervix dilated slowly and delivery was effected by forceps, a live male child being extracted. The placenta was cast immediately after and some hæmorrhage occurred, which was controlled by firm pressure, and ergotine given hypodermically. Soon after delivery the temperature rose to 101° F. and the lochia two days subsequently became offensive. The soft parts were much bruised and took on an unhealthy action. She became worse with high temperature and died on the 21st April.

CASE VIII.—*Labour Difficult, Laborious, Forceps, Puerperal Septicæmia.— Ammayee*, æt. 28 years, Hindu, I Para. An out-case, admitted 26th April, seventeen hours in labour with her fifth child at full term. Much exhaustion present, uterus in a state of tonic contraction, temperature 100° F, pulse 124 small, fœtal heart audible, cervix fully dilated, membranes absent, liquor amnii mixed with meconium, head jammed in the pelvic cavity with a large scalp tumour. Under chloroform delivery was effected easily, a live female child being extracted. After delivery the temperature rose to 103° F., the lochia became putrid, and she became gradually worse and died on the 6th May.

CASE IX.—*Labour Difficult, Laborious, Forceps, Puerperal Septicæmia, Metro-peritonitis.—Valliamah*, æt. 18 years, Pariah, I Para. An out-case, admitted from Saidapet on the 12th July, thirty hours in labour with her first child at full term and in a very exhausted state. Temperature 98° F.,

pulse 132 small, uterus in a state of spastic contraction and tender, abdomen tympanitic at the sides, fœtal heart inaudible, vulva and perineum bruised and lacerated from manipulation before admission, membranes absent, liquor amnii decomposed, head presenting with a large scalp tumour in the pelvic cavity in the fourth position. Under chloroform delivery was effected easily by forceps, a still female child being extracted. After delivery great tenderness was present over the uterus, the abdomen became more tympanitic, the lochia very offensive, and she sank and died at 10 a.m., 13th July.

Case X.—*Labour Difficult, Laborious, Forceps, Puerperal Septicæmia.—Mrs. E. R.*, East Indian, æt. 38 years, I Para. A stout, flabby, nervous woman, was admitted on the 30th September, twelve hours in labour with her first child at full term. Labour progressed slowly and delivery was accomplished by forceps, the perineum lacerating for three-fourths of an inch: a live child was extracted. After delivery she became very excitable and restless, the temperature rose to 102° F., the soft parts, which were bruised, took on an unhealthy action, the lochia became very offensive, and she became gradually worse and died on the eighth day of delivery, the temperature rising to 106° F. before death.

Case XI.—*Labour Difficult, Laborious, Cephalotripsy, Puerperal Septicæmia.—Govindamma*, æt. 16 years, Pariah, I Para. An out-case, admitted 8 a.m., 22nd November, forty-eight hours in labour with her first child at full term, and in a very low state. Temperature 101·2° F., pulse 156 small, uterus rigid, abdomen tympanitic at the sides, fœtal heart inaudible, cervix fully dilated, membranes absent, head presenting with a large scalp tumour and jammed in the cavity of the pelvis. After free stimulation delivery was effected by cephalotripsy without much difficulty, a large quantity of decomposed liquor amnii escaping on the birth of the child. After delivery the temperature rose to 101° F., considerable sloughing of the vagina occurred resulting in vesico-vaginal and recto-vaginal fistulæ. She gradually sank and died on the 7th December.

Case XII.—*Labour Difficult, Laborious, Protracted Labour, Cephalotripsy, Puerperal Septicæmia.—Muniamah*, æt. 18 years, Pariah, I Para. An out-case, admitted 12th November, seventy-two hours in labour with her first child at full term, and in an exhausted condition. Temperature 99·2° F., pulse 136 small, cervix fully dilated, membranes absent, said to have ruptured twelve hours before admission, vulva and soft parts much bruised and swollen, head jammed in the pelvic cavity, liquor amnii offensive. Under chloroform delivery was effected by cephalotripsy. Soon after delivery the temperature rose to 103° F., the lochia continued offensive, and she gradually sunk and died on the 13th December.

Case XIII.—*Labour Difficult, Laborious, Protracted Labour, Cephalotripsy, Exhaustion.—Mauree*, æt. 20 years, Hindu, II Para. An out-case, admitted 11-15 a.m., 7th November, from a village 15 miles distant, thirty hours in labour with her second child at full term and in a very exhausted condition. Temperature 99·2° F., pulse 120 small, fœtal heart inaudible, uterus in a state of spastic contraction, cervix fully dilated, membranes absent, said to have ruptured eighteen hours before admission, head presenting in the pelvic cavity with a large scalp tumour, liquor amnii greenish and offensive. Under chloroform delivery was effected with some difficulty by cephalotripsy. The exhaustion before delivery continued, and, notwithstanding free stimulation, she sank and died on the 11th November.

Case XIV.—*Labour Difficult, Laborious, Cephalotripsy, Puerperal Septicæmia, Exhaustion.—Vulliama*, æt. 20 years, Hindu, I Para. An out-case, admitted 4 p.m., 2nd August, said to have been five days in labour with her first child at full term and in a very low state and very restless. Uterus rigid, temperature 98° F., pulse 136 small, fœtal heart inaudible, cervix fully dilated, membranes absent, head in the pelvic cavity and impacted, liquor amnii decomposed. Under chloroform delivery was effected by cephalotripsy. After delivery the temperature rose to 104° F., restlessness continued, and she died at 10 a.m., 3rd August.

Case XV.—*Labour Difficult, Laborious, Protracted Labour, Cephalotripsy, Death from Exhaustion.—Moeniamah*, æt. 26 years, Hindu, II Para. An out-case, admitted 3-15 p. m., 29th June, fifteen hours in labour with her second child at full term, and in a moribund state. Temperature 101·6° F., pulse 152 small and weak, uterus rigid, abdomen tympanitic at the sides, feet œdematous, labia swollen and ulcerated, urine tinged with blood, cervix fully dilated, membranes absent, said to have ruptured at the onset of labour, head tightly impacted in the pelvic brim with a large scalp tumour, pelvis narrow in the transverse diameter, fœtal heart inaudible. After stimulation and under chloroform delivery was effected without much difficulty by cephalotripsy. She was freely stimulated, but did not rally and died at 4 a.m., 30th June.

Case XVI.—*Labour Difficult, Laborious, Cephalotripsy, Puerperal Septicæmia (Removed dying).—Agatha*, æt. 24 years, Pariah, III Para. An out-case, admitted 6 a.m., 9th June, seventy-two hours in labour with her third child at full term. Temperature 99·6° F., pulse 108 of fair force, uterus rigid, fœtal heart inaudible, membranes absent, head jammed in the pelvic cavity. Under chloroform delivery was effected without difficulty by cephalotripsy. After delivery the temperature rose to 102° F., the lochia became offensive, and she grew gradually worse and was removed by her relatives in a dying state on the 16th June.

Case XVII.—*Labour Difficult, Laborious, Cephalotripsy, Exhaustion.—Thungama*, æt. 16 years, Hindu, I Para. An out-case, admitted from Tripatty by train on the 24th February seventy-two hours in labour with her first child at full term and in a very low condition. Temperature 98·8° F., pulse 120 small and weak, conjunctivæ jaundiced, uterus in a rigid condition, fœtal heart inaudible, cervix three-fifths dilated, membranes absent, said to have ruptured twenty-four hours before admission, head presenting in the brim with a large scalp tumour, liquor amnii offensive, urine contains bile. Under chloroform delivery was effected without difficulty by cephalotripsy. The exhaustion increased after delivery and she died six hours after.

Case XVIII.—*Labour Difficult, Laborious, Protracted Labour, Died undelivered.—Manicum*, æt. 20 years, Hindu, I Para. An out-case, was admitted 1 p. m., 3rd October, from Guduvancheri, in a moribund state, having been thirty hours in labour with her first child at full term. Temperature 98° F., pulse 140 small and weak, fœtal heart inaudible, labia and parts around swollen, cervix fully dilated, membranes absent, head jammed in the pelvic cavity with a large scalp tumour. A few whiffs of chloroform were administered after stimulation in order to deliver her, but she died before this could be accomplished.

Case XIX.—*Labour Difficult, Laborious, Calculus in Bladder, Cæsarian Section.—Amoorthum*, æt. 21 years, Hindu, I Para. An out-case, admitted 2 a.m., 20th September, seventy-two hours in labour with her first child at full term. Fœtal heart audible, vagina small, cervix two-fifths dilated, membranes absent, head presenting in the brim in the first position, symphysis pubis abnormally thick and projecting inwards, reducing the direct conjugate to less than 2 inches, and there was also little room in the transverse diameter. As delivery by the natural passages would be difficult and dangerous, delivery was effected by Cæsarian section, a live child, weighing 5½ lb., was removed; very little blood was lost, and the patient did fairly well for a day after the operation, but broncho-pneumonia, which was present before the operation became aggravated. Diarrhœa set in and she died on the 29th September, tenth day of operation. On *post-mort-m* examination, the broad ligaments were found in an inflamed and sloughy condition. A hard tumour was felt behind the symphysis pubis and seemed to grow from it. On trying to differentiate the tumour in its dimensions it was found to move, and only then was it discovered that it was inside the bladder. The bladder was opened and a stone weighing 800 grains, 2 inches long and 1⅜ inches broad and 1 inch thick, was removed.

Case XX.—*Labour Preternatural, Compound, Head and Hand Presentation, Cephalic Version and Forceps, Exhaustion.—Mungathoyee*, æt. 35 years, Hindu, VIII Para. An out-case, admitted 2 p.m., 8th August, twenty hours in labour with her eighth child at full term of gestation, and in a moribund state. Temperature 98° F., pulse 110 small, fœtal heart inaudible, cervix fully dilated, head and hand presenting. Under chloroform the hand was pushed up and delivery effected by Simpson's forceps, a female macerated child being extracted. The placenta not being cast, was removed half an hour after by the hand introduced into the uterine cavity. She became much weaker after delivery, and although freely stimulated, sank and died at 3-45 P.M.

Case XXI.—*Labour Preternatural, Compound, Head and Hand Presentation, Cephalotripsy, Exhaustion.—Rungum*, æt. 30 years, Hindu, V Para. An out-case, admitted 3 p.m., 16th August, from Arkonam in a moribund state; said to have been five days in labour with her fifth child at full term, pulse was almost imperceptible, surface of body cold and clammy, uterus rigid, labia and soft parts swollen and œdematous, cervix fully dilated, membranes absent, head and hand presenting at the brim, liquor amnii offensive, chloroform was sparingly given and delivery effected by cephalotripsy. She was freely stimulated, but did not rally and died four hours after admission.

Case XXII.—*Labour Complex, Plural Births, Twins, Accidental Hæmorrhage.—Soondrum*, æt. 30 years, Hindu, VI Para. An out-case, admitted 7 a.m., 4th August, in a moribund state; said to have been delivered of a female child the day previous and to have lost a great deal of blood. The uterus was found large, cervix fully dilated, a second bag of membranes was found entire and the breech presenting. The membranes were ruptured artificially and a still female child was delivered without difficulty. Two separate placentæ were cast immediately after with large dark clots. Soon after delivery she became restless, the pulse became imperceptible, and, although freely stimulated, did not rally and died at 12-40 a.m., five-and-a-half hours after admission.

Case XXIII.—*Labour Complex, Plural Births, Triplet, Puerperal Septicæmia.—Haleem Bee*, æt. 34 years, Muhammadan, III Para. An out-case, admitted 26th August in the eighth month of pregnancy suffering with general anasarca. Urine was found loaded with albumen and the bowels were irritable, motions being frequent, small and containing mucus. At 11-30 p.m., 28th August, she was delivered by natural powers of a premature male child; another bag of membranes presented; was ruptured and a still male child was born by natural powers. A few minutes after two separate placentæ were cast, and between them was a bag of membranes containing a fœtus, shrivelled and of the size of a three months' fœtus. She did well up to the sixth day, when the lochia became offensive, the temperature rose to 102° F., and frequent rigors occurred. She did not improve and died from septicæmia on the 12th September.

Case XXIV.—*Labour Complex, Twins, Pneumonia, Forceps.—Murugamah*, æt. 25 years, Hindu, III Para. An out-case, admitted 11-20 a.m., 4th September, in a moribund state, nine months pregnant, and in labour for sixteen hours before admission. Temperature 98·6° F., pulse almost imperceptible, general anasarca present, and a loud bruit replaces the second sound of the heart. Under A.C.E. mixture delivery of the first child was effected with forceps, but during the delivery of the second child she expired. On inquiry it is elicited that the woman was suffering from cough and fever for several days before admission.

Case XXV.—*Labour Complex, Twins, Anæmia, Exhaustion.—Authee*, æt. 34 years, Hindu, VIII Para. An out-case, admitted 4 p.m., 24th September, after delivery of a live male child at her house two hours previously. The uterus was found still large and a second child in utero. The membranes were ruptured artificially and a still female child was born by natural powers. The woman was very anæmic and weak, and on the third day of delivery diarrhœa set in, under which she sank.

Case XXVI.—*Labour Complex, Twins, Puerperal Convulsions, Died undelivered.—Veeram[illegible]*, æt. 19 years, Hindu, I Para. An out-case, admitted 7 p.m., 31st October, in a moribund state with a history of convulsive fits before admission. Uterus corresponds to the full term, fœtal heart inaudible, cervix fully dilated, membranes absent, said to have ruptured an hour previously. She was fully stimulated, but died half an hour after admission and before delivery could be effected. After delivery the uterus was emptied and two children were extracted by the natural passages.

Case XXVII.—*Labour Complex, Accidental Hæmorrhage, Died undelivered.—Shereff Bee*, æt. 35 years, Muhammadan, II Para. An out-case, admitted 4-15 a.m., 8th May, in a moribund state, having suffered from hæmorrhage since 3 a.m., and in the ninth month of pregnancy. She was very restless with an almost imperceptible pulse, tongue pale, conjunctivæ white, cervix was three-fifths dilated, membranes entire, head presenting. The membranes were ruptured artificially, and she was freely stimulated, but she did not rally and died an hour and-a-half after admission.

CASE XXVIII.—*Labour Complex, Accidental Hæmorrhage, Cephalotripsy.—Rungamah*, æt. 25 years, Hindu, IX Para. An out-case, admitted 1 p.m., 6th July, twelve hours in labour with her ninth child at full term; is said to have had hæmorrhage at home, uterus was acting feebly, fœtal heart inaudible, membranes entire, cervix two-fifths dilated. The membranes were ruptured artificially, and at 4 p.m. she was delivered by cephalotripsy. The placenta was cast immediately after with several large dark clots, and as some smart bleeding was going on, the uterine cavity was douched with hot water of temperature of 120° F.; this failed to avert the hæmorrhage, the uterus was then swabbed with solution of perchloride of iron and plugged with iodoform gauze. She became collapsed from the loss of blood, and, although freely stimulated, did not rally and died at 5-10 p.m., four hours after admission.

CASE XXIX.—*Labour Complex, Placenta Prævia, Podalic Version, Hæmorrhage.—Choolamah*, æt. 36 years, Hindu, VIII Para. An out-case, admitted 5-10 p.m., 12th January, in a moribund state, having had free hæmorrhage for ten hours before admission. Is eight months pregnant, and the placenta was found presenting over the internal os, the cervix being two-fifths dilated. The membranes were ruptured through the placental mass, a tight binder applied, and the woman freely stimulated. At 10-20 p.m., as her condition had improved, she was delivered by podalic version without difficulty. She did not improve although freely stimulated, and died two hours after delivery or seven hours after admission.

CASE XXX.—*Labour Complex, Placenta Prævia, Hæmorrhage, Died undelivered.—Nafeesa Bee*, æt. 25 years, Muhammadan, VII Para. An out-case, admitted in a moribund state at 2-30 p.m., 19th January, in the ninth month of pregnancy and with a history of having had considerable bleeding before admission. Temperature subnormal, pulse almost imperceptible. On a vaginal examination, the cervix was found two-fifths dilated and the placenta situated over the internal os. She was freely stimulated, but did not rally, and died an hour after admission undelivered.

CASE XXXI.—*Labour Complex, Placenta Prævia, Forceps, Hæmorrhage.—Vulliamah*, æt. 25 years, Hindu, IV Para. An out-case, admitted in a moribund state, 2-20 p.m., 24th August, in the eighth month of pregnancy and having had considerable hæmorrhage for thirty hours previously. The cervix admitted a finger and a flap of the placenta was felt on the right side, the membranes, which were entire, were ruptured artificially. The cervix dilated quickly, and at 3-45 p.m., as she had improved, delivery was effected without difficulty by forceps. She did not improve, and, although freely stimulated, died at 4-10 p.m., less than two hours after admission.

CASE XXXII.—*Labour Complex, Post-partum Hæmorrhage, Second Degree, Contracted Pelvis, Breech Presentation, Premature Rupture of Membranes, Extraction and Cephalotripsy, Laceration of Cervix, Laceration of Perinæum, Puerperal Septicæmia, Metro-Peritonitis.—Mrs. J. H.*, æt. 30 years, European, I Para. An out-case, a pale anæmic woman, who has been but poorly nourished during her pregnancy, was admitted at 6 p.m. on the 14th May in labour with her first child at full term. On examination the cervix admitted a finger, membranes absent, said to have ruptured three hours before admission, breech presenting, labour progressed slowly, and after being thirty hours in pains, the cervix was then only three-fifths dilated, and, as she was becoming exhausted, it was decided to deliver. A foot was brought down and the body and shoulders delivered. During the birth of the shoulders the perinæum ruptured. The head could not be delivered by extraction and had to be crushed and extracted, the sacral promontory being unusually forward, the direct conjugate being estimated at 2½ inches. The placenta was cast half an hour after and a good deal of bleeding took place from the perinæum and from the cervix, which was also lacerated; metro-peritonitis developed on the third day, the temperature rose, the lochia became offensive, and she died on the seventh day after delivery.

CASE XXXIII.—*Labour Complex, Post-partum Hæmorrhage, Third Degree.—Thayaroo*, æt. 25 years, Hindu, VI Para. An out-case, admitted 3 p.m., 5th September, three hours after delivery of a female child and with the placenta retained. Is said to have lost considerable blood, temperature 95° F., pulse almost imperceptible. She was freely stimulated, and at 8 a.m., 6th September, as her pulse had improved under chloroform the placenta was removed piece-meal. The improvement in her condition did not continue, and she gradually sank and died at 4-30 p.m.

CASE XXXIV.—*Labour Complex, Post-partum Hæmorrhage, Third Degree.—Perithoyee*, æt. 28 years, VII Para. An in-case, an anæmic and badly nourished woman, was admitted 12 midnight, 28th April, in labour with her seventh child at full term. The cervix was found fully dilated, membranes entire, head presenting. The membranes were ruptured and almost immediately after a female child was born by natural powers; the placenta was cast in fifteen minutes, followed by some smart bleeding; the uterus was supported by hand and ergot given, the uterus did not contract but kept flaccid, and there was a constant oozing; a hot uterine irrigation temperature 120° F. was given but with little effect. The woman soon got into a state of collapse, and, although freely stimulated, sank and died at 4 a.m., 29th April, four hours after admission.

CASE XXXV.—*Labour Complex, Retained Placenta, Simple Retention, Metro-Peritonitis.—Thoyee*, æt. 23 years, I Para. An out-case, admitted 6-35 a.m., 4th February, two hours after delivery of a live female child and with the afterbirth retained. She is said to have lost a considerable amount of blood. Temperature 96° F., pulse almost imperceptible, surface of body cold and clammy. She was freely stimulated, and when her pulse had improved somewhat; under chloroform the placenta was removed piece-meal; she did not improve and died of metro-peritonitis on the 7th February.

CASE XXXVI.—*Labour Complex, Morbid Adhesion of Placenta, Puerperal Septicæmia.—Vathum*, æt. 26 years, Hindu, V Para. An out-case, admitted 5th August in the ninth month of pregnancy in an emaciated condition and suffering from dysentery. She was delivered on the 6th August, and the third stage was reported natural. On the third day the lochia became very offensive, the temperature rose to 103° F., and a good deal of prostration was present. On the sixth day no improvement occurring in the lochia; under chloroform the uterus was curetted and several pieces of gangrenous placental tissue were brought away. She did not improve after this, but rapidly sank and died on the 14th August.

CASE XXXVII.—*Labour Complex, Cicatricial Contraction of Vagina, Narrow Pubic Arch, Cephalotripsy, Rupture of Vagina and Uterus, Abdominal Section.—Katoor Bee*, æt. 19 years, Muhammadan, II Para,

An out-case, admitted from Triplicane, three days in labour with her second child at full term, uterus rigid, temperature 105° F., pulse 140, fœtal heart inaudible, vagina just admitted a finger, being contracted by hard cicatricial tissue just within the ostiam vagina, pubic arch was narrow, cervix was fully dilated, membranes entire, head presenting; the membranes were ruptured artificially, the vagina dilated by incisions and Barnes' bags and delivery effected by cephalotripsy. The placenta not being expelled in half an hour and expression failing, an examination revealed a rent in the vagina and uterus, the placenta having escaped into the abdominal cavity. The abdominal cavity was at once opened, the placenta and clots removed, the cavity sponged out, the rent in the vagina and uterus sewn up with fine silk and the abdomen closed with silkworm gut sutures. She was freely stimulated, but became worse and died two hours after.

CASE XXXVIII.—*Labour Complex, Laceration of Vagina, Podalic Version.—Kunne*, æt. 28 years, Pariah, VI Para. An out-case, admitted in a moribund state at 2-30 a.m., 17th June, four hours in labour with her sixth child at full term. Temperature normal, pulse 124 small, uterus rigid, fœtal heart inaudible, cervix fully dilated, face and left arm presenting. Under chloroform, delivery was effected by podalic version, an attempt to decapitate having failed. Examination after delivery revealed partial laceration of the anterior vaginal wall. She died of peritonitis on the 20th June.

CASE XXXIX.—*Labour Complex, Puerperal Convulsions, Barnes' Bags, Forceps.—Umbathai*, æt. 16 years, Hindu, I Para. An out-case, admitted 11-30 a.m., 15th June, in a semiconscious state, in labour with her first child at full term and having had two convulsive fits before admission. Temperature 100° F., pulse 120, legs and feet œdematous, fœtal heart audible, cervix admits a finger, membranes entire, head presenting, urine loaded with albumen. The cervix was dilated artificially and delivery effected by forceps. After delivery fits continued to occur and the temperature rose to 105° F., and she died on the third day after delivery.

CASE XL.—*Labour Complex, Puerperal Convulsions, Cephalotripsy.—Mrs. E. R.*, æt. 31 years, East Indian, I Para. An out-case, admitted at 6-45 a.m., 14th August, in an unconscious state in the eighth month of pregnancy and having had three convulsive fits before admission. Fœtal heart inaudible, cervix admits a finger, membranes entire, head presenting, urine becomes almost solid with albumen on boiling. The membranes were ruptured, the cervix dilated artificially, and delivery effected by cephalotripsy. The fits continued after delivery and she died comatose at 6-15 p.m., nearly twelve hours after admission.

CASE XLI.—*Labour Complex, Puerperal Convulsions, Barnes' Bags, Died undelivered.—Mooniammah*, æt. 20 years, Pariah, I Para. An out-case, admitted 8-45 a.m., 14th September, in the eighth month of her first pregnancy and in an unconscious state, having had seven convulsive fits before admission. Temperature 102·2° F., pulse 118, uterus not acting, fœtal heart heard on the left side, cervix admits a finger, membranes entire, head presenting. The fits continued with greater force and frequency and at 5-30 p.m., after artificial dilatation of the cervix with Barnes' bags, an attempt was made to deliver but she died while the forceps were being introduced.

CASE XLII.—*Labour Complex, Puerperal Convulsions, Forceps.—Cunneamah*, æt. 20 years, Hindu, I Para. An out-case, admitted 8-15 a.m., 29th September, in an unconscious state in labour with her first child at full term, and having had several convulsive fits since 10 o'clock the previous night. Temperature 101° F., pulse 120, breathing hurried, uterus acting, fœtal heart inaudible, cervix admits two fingers, membranes entire, head presenting. The membranes were ruptured artificially and the cervix was fully dilated at 10-30 a.m., when delivery was effected by forceps, a still male child being extracted. The fits continued after delivery, the temperature rose to 103° F., and she became worse, and died comatose at 10-45 p.m.

CASE XLIII.—*Labour Complex, Puerperal Convulsions, Died undelivered.—Lutchmee*, æt. 20 years, Hindu, I Para. An out-case, admitted 6 p.m., 25th October, in an unconscious state in the ninth month of her first pregnancy, having had several convulsive fits at her house. Face is puffy, feet œdematous, breathing laboured, urine contains three-fourths its volume of albumen, fœtal heart inaudible, cervix admits a finger, membranes entire, head presenting. The membranes were ruptured artificially. She became worse, the breathing more laboured, and she died cyanosed at 11-30 p.m. undelivered.

CASE XLIV.—*Labour Complex, Puerperal Convulsions, Post-partum.—Valliamah*, æt. 27 years, Pariah, IV Para. An out-case, was admitted 10 a.m., 28th October, five hours in labour with her fourth child in the eighth month of gestation. Delivery proceeded naturally and a live premature child was born, feet presenting, without assistance. She did well up to the fourth day, when dysentery set in, which was controlled by a few doses of Dover's powder. On the eighth day she became unconscious with tetanic spasms. She died comatose twenty-four hours afterwards, the temperature keeping at 104° F. during this time.

CASE XLV.—*Labour Complex, Broncho-pneumonia, Parotitis, Septicæmia.—Chinnacunno*, æt. 20 years, Pariah, II Para. An out-case, admitted 30th November in the ninth month of pregnancy with fever and cough of three days' duration. Temperature 100° F., pulse 120, dullness was present over base of both lungs and auscultation revealed crepitation. She was delivered by natural powers an hour after admission. After delivery she improved, but a week subsequently both parotid glands became inflamed, suppurated, the cellular tissue on the sides of the neck sloughed extensively, and she died from exhaustion on the 22nd December.

CASE XLVI.—*Labour Complex, Dysentery, Forceps. Exhaustion.—Juada Bhai*, æt. 19 years, Mahratta, I Para. An out-case, admitted 6-45 p.m., 3rd March, in a moribund state, three days in labour and suffering from dysentery of two months' duration. Is nine months pregnant, temperature 99° F., pulse 116, fœtal heart faintly audible, cervix fully dilated, membranes absent, head presenting. Delivery was effected by forceps at 8 p.m., a still child being extracted. She became worse after delivery and died at 11-30 p.m. five hours after admission.

CASE XLVII.—*Labour Complex, Dysentery, Induction of Labour, Podalic Version.—Mrs. E. L.*, æt. 23 years, European, IV Para. An out-case, was admitted 3rd April in the sixth month of pregnancy and

suffering from dysentery of three weeks' duration. Has been at Gooty, from which place she arrived in a very low state. She did not improve under treatment, and labour was induced on the 5th April, and after dilatation of the cervix by Barnes' bags, delivery was effected by podalic version, a small live child being extracted. She did not improve after delivery and grew worse and died on the 9th April.

Case XLVIII.—*Labour Complex, Dysentery, Puerperal Septicæmia.—Minchee*, æt. 19 years, Hindu, II Para. An out-case, admitted 20th November, twenty-four hours in labour with her second child at full term and suffering with dysentery of ten days' duration; was delivered by natural powers on the night of 21st November. The dysentery continued, and she developed septicæmia and died on the 30th November.

Case XLIX.—*Labour Complex, Heart Disease, Died undelivered.—Mrs. A. V.*, æt. 20 years, European, II Para. An emaciated woman, was admitted on the 13th September in the sixth month of pregnancy, having had fever and diarrhœa for a month previously. Heart examination showed mitral incompetence. Under treatment she improved slightly; labour set in on the 3rd October, 7 p.m., and she died at 7-45 a.m., 4th October, undelivered.

Case L.—*Labour Complex, Privation.—Sundaree*, æt. 24 years, Native Christian, V Para. An emaciated woman, who has been subjected to much privation, was admitted 10 a.m., 20th January, in the eighth month of pregnancy with vomiting and diarrhœa. The cervix was two-fifths dilated, membranes entire, head presenting. The membranes were artificially ruptured, and she was nourished and freely stimulated. A male child was born by natural powers at 8-45 p.m. She became much weaker and gradually sank and died at 3-30 a.m., 31st January.

Case LI.—*Labour Complex, Pneumonia.—Thayamah*, æt. 30 years, Hindu, VI Para. An out-case, was admitted on the 16th September, 6 a.m., in labour with her sixth child at full term and with double pneumonia. Temperature 103° F., pulse 128, breathing laboured. Delivery occurred by natural powers six hours after admission. She became rapidly worse and died at 6 p.m., 17th September.

Case LII.—*Labour Complex, Prolapse of Uterus, Protracted Labour, Cephalotripsy, Exhaustion.—Soranamah*, æt. 35 years, Pariah, VIII Para. An out-case, was admitted in a moribund state at 2-15 p.m., 24th October, forty-eight hours in labour with her eighth child at full term, was brought from Pallávaram. Temperature 100·6° F., pulse almost imperceptible, uterus rigid and tender, fœtal heart inaudible, cervix prolapsed, bruised, and in almost a gangrenous state, liquor amnii greenish and offensive, head presenting. After free stimulation she was delivered without difficulty by cephalotripsy. She did not rally and died three hours after admission.

Case LIII.—*Labour Complex, Remittent Fever.—Mrs. E. N.*, æt. 25 years, East Indian, VI Para. An out-case, admitted 7th December 1894 in the ninth month of her sixth pregnancy and suffering from remittent fever. Conjunctivæ tinged yellow, liver and spleen slightly enlarged. As the fever continued notwithstanding treatment, labour was induced on the 12th December, and she was delivered by natural powers at 10 p.m. on the 13th December. She did not improve after delivery, became gradually worse and died on the 7th January.

Case LIV.—*Labour Complex, Remittent Fever.—Anganah*, æt. 35 years, Hindu, VIII Para. An out-case, admitted 5 p.m., 31st May, twelve hours in labour with her eighth child at full term and suffering from remittent fever of two weeks' duration; much exhaustion was present, temperature 100° F., pulse 140, cervix two-fifths dilated, membranes entire. She was delivered by natural powers on the 1st June 7 a.m., a hydrocephalic, macerated fœtus being born. The placenta was adherent and required manual extraction. She became worse after delivery and died on the 2nd June, 8 a.m.

Case LV.—*Abortion, Albuminuria, Anasarca.—Mooneamah*, æt. 22 years, I Para, Hindu. An out-case, was admitted at 6 a.m., 22nd January, six months pregnant, in a very anæmic state and suffering from general anasarca. Urine found loaded with albumen, temperature 99° F., pulse 140, breathing hurried, lungs dull posteriorly. She aborted at 12 noon and became much worse and died at 3 p.m.

Case LVI.—*Abortion, Dysentery.—Thglasiamah*, æt. 30 years, Hindu, III Para. An out-case, admitted 8th February, four months pregnant with her third child and suffering from dysentery of a month's duration; is in a very low state, pulse small, tongue dry. She aborted four hours after admission and rapidly sank and died at 6 a.m., 9th February.

Case LVII.—*Abortion, Dysentery.—Rukumani*, æt. 30 years, Hindu, III Para. An out-case, admitted 10 a.m., 21st June, five months pregnant and suffering from dysentery of a month's duration. She was very low and aborted eight hours after admission. The dysentery continued. She became gradually weaker and died on the 30th June.

Case LVIII.—*Abortion, Dysentery.—Muthialu*, æt. 25 years, Pariah, III Para. An out-case, was admitted on the 5th August in the fifth month of pregnancy and suffering from dysentery of a month's duration; much emaciation present, pulse thready, temperature 101° F. She improved slightly under treatment and aborted on the 15th August. She became much worse after delivery and sank and died on the 17th August.

Case LIX.—*Abortion, Dysentery.—Tholasee*, æt. 25 years, Hindu, V Para. An out-case, admitted 3rd October in the sixth month of pregnancy suffering from dysentery of a month's duration. Much emaciation and weakness present. She aborted on the 4th October, became gradually worse and died on the 6th October.

Case LX.—*Abortion, Heart Disease.—Rungamah*, æt. 28 years, Hindu, V Para. An out-case, admitted 10th May with œdema of both feet and urgent dyspnœa and in the fifth month of pregnancy. Examination of heart revealed mitral incompetence. She aborted eight hours after admission, the dyspnœa continued and she gradually sank and died on the 12th May.

Case LXI.—*Abortion, Puerperal Convulsions.—Ammoyee*, æt. 22 years, Hindu, III Para. An out-case, admitted on the 21st December in an unconscious state, having had several convulsive fits before admission. Is six months pregnant; temperature normal, pulse 80. The membranes were ruptured artificially and the cervix dilated by Barnes' bags. She aborted on the 22nd December, the placenta

requiring removal by the hand. The convulsions ceased after the uterus was emptied, but the temperature rose to 105° F. and she gradually sank and died on the 25th December.

Case LXII.—*Abortion, Pneumonia, Died undelivered.—Baikium*, æt. 28 years, Pariah, VII Para. An out-case, was admitted 7 a.m., 21st February, in a moribund state, suffering from double pneumonia and in the seventh month of pregnancy. Temperature 103° F., pulse 128, respiration 36, cervix admitted two fingers, membranes absent. She was freely nourished and stimulated, but she did not improve, and at 5 a.m., 22nd February, attempted to sit up, when she fell back and life became extinct.

Case LXIII.—*Abortion, Peritonitis before admission.—Chokamah*, æt. 22 years, Hindu, I Para. An out-case, was admitted in a moribund state in the third month of her first pregnancy. Abdomen tympanitic and tender, pulse almost imperceptible. A small fœtus was expelled soon after admission, and no attempt was made to remove the placenta owing to the woman's low state. She died six hours after admission.

Case LXIV.—*Abortion, Putrid Fœtus, Puerperal Septicæmia.—Fatma Bee*, æt. 25 years, Muhammadan, IV Para. An out-case, was admitted 9 a.m., 21st May, in the fourth month of pregnancy and with a foul discharge from the vagina. Temperature 105° F. pulse 120, small, the cervix admitted a finger. On the 23rd May, as her temperature still kept high, and several rigors had occurred, she was placed under chloroform and the uterus was emptied by dilatation with Hegar's dilators of a putrid fœtus and placenta. The fever continued after delivery with rigors, diarrhœa set in, and she died on the 19th June.

Case LXV.—*Abortion, Retained Placenta, Puerperal Septicæmia.—Kunnamah*, æt. 30 years, Hindu, V Para. An out-case, was admitted at 9 a.m., 3rd August, with a history of having aborted five days previously and of having lost a considerable amount of blood. Pulse small and weak, temperature 100° F., uterus is large, cervix admits a finger. Under chloroform the cervix was dilated with Hegar's dilators and the placenta, which was adherent, was removed by a blunt curette. She did fairly well up to the 9th August, 9-30 a.m., when she became suddenly collapsed with rapid and difficult respiration and died within an hour.

Case LXVI.—*Abortion, Retained Decidua, Septic Peritonitis.—Lakshmi*, æt. 21 years, Pariah, II Para. An out-case, admitted 22nd September with a history of having aborted two days previously; was four months pregnant, abdomen tympanitic and tender, temperature 101° F., pulse 120 small, cervix admitted two fingers, and from it was protruding a piece of bamboo, five inches long and of the thickness of an ordinary lead pencil, with a piece of rag wrapped at its distal end; there was a dark, offensive discharge from the uterus. Under chloroform the uterus was curetted, pieces of offensive decidual membrane being removed. She became worse and died at 12-30 midnight, 23rd September.

Case LXVII.—*Abortion, Cystitis, Puerperal Septicæmia.—Chinnamah*, æt. 38 years, Hindu, II Para. An out-case, was admitted on the 13th September in the fourth month of her second pregnancy with cystitis of a month's duration and in a very low state, being badly nourished. She aborted on the 18th September, and the placenta, which was adherent, was removed under chloroform. She became worse, diarrhœa set in, and she died of septicæmia on the 25th September.

(Signed) A. J. STURMER,
Offg. Supt., Lying-in Hospital & Egmore Female Dispensary.

MADRAS,
1st January 1895.

No. 4.—GOVERNMENT OPHTHALMIC HOSPITAL.

ANNUAL REPORT OF THE GOVERNMENT OPHTHALMIC HOSPITAL, MADRAS, FOR 1894.

ADMINISTRATION REPORT.

Dispensary Buildings.—The Hospital and Dispensary buildings are in a good state of repair. The rattan blinds have been repaired and renovated. The waiting-shed for native out-patients being found too small to accommodate the increasing number of sick was enlarged at a cost of Rs. 1,179–4–7.

Internal Economy.—Brigade-Surgeon-Lieutenant-Colonel E. F. Drake-Brockman, F.R.C.S., having retired from the service on the 4th April 1894, I was appointed to the permanent charge of the institution having been in acting charge for two years. The total expenditure during the year amounted to Rs. 16,873–7–1, which is Rs. 563–3–9 less than that of last year.

Diet cost Rs. 5,264–6–0 as compared with Rs. 5,368–8–4 for the previous year. The difference is due to the smaller average daily sick for the year under report.

Recoveries were made from 151 patients and amounted to Rs. 1,255, which is Rs. 291–12–6 in excess of the previous year.

The average cost of each diet amounted to As. 7–1 for Europeans and As. 3–7 for natives.

The service books of all servants on the permanent establishment have been verified and kept up to date.

An inventory list of all Government property is kept, and the valuable stock was verified during the year in June and December and found to be correct.

The night-soil is removed in the conservancy cart belonging to the hospital by the municipality, who are paid Rs. 14 per mensem for the services of a driver and a bullock.

The Surgeon-General with the Government of Madras inspected the hospital twice during the year—once on the 24th May and again on the 21st December. On the last occasion he made the following remarks in the Visitors' book :—

"Visited the hospital with Surgeon-Major Pope, and I am much pleased with the good order of every part of the institution. There were 47 in-patients. The general wards are constantly full. It is desirable to experiment with barton's Burners in the present lamps, price Rs. 1–8–0 at Messrs. Orr & Sons. The old night chairs should be condemned and the Madras Railway sanitary pattern substituted. The late addition to the out-patients' waiting room is a great improvement."

PROFESSIONAL REPORT.

The total number of patients treated during the year was as follows :—

In-door ..	European Military	12	
	Native Military	85	
	European and Eurasian Civil	140	
	Native Civil	1,516	
	Total ..	1,753	
Out-door ..	European and Eurasian	812	
	Natives	7,440	
	Total ..	8,252	

There has been an increase of 23 in-door patients and a decrease of 55 out-door patients as compared with the previous year.

The average daily sick was 56·25 in-door and 97·59 out-door patients or a total of 153·84 in- and out- patients. The average daily sick of in- and out- patients for 1893 was 152·56.

There were no deaths during the year.

The following comparative statement shows the number of patients treated and the average daily sick for the past five years :—

	1890.		1891.		1892.		1893.		1894.	
	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.
Number treated	1,488	7,453	1,598	7,696	1,724	8,622	1,680	8,307	1,703	8,252
Daily average sick	55·31	108·13	55·18	109·20	62·13	126·36	58·52	94·04	56·25	97·59

Diseases of the Conjunctiva.—The largest number of admissions was under the head of affections of the conjunctiva. Of these catarrhal ophthalmia holds the most prominent position. The disease was very prevalent during the months of August, September and October. The largest number of cases was treated in September.

Gonorrhœal Ophthalmia, which in previous years was shown under the head of diseases of the conjunctiva, has been included under the head of general diseases, group A, sub-group IV. There were four in-door patients and nine out-door patients treated for this disease during the year.

Pterygium and Pinguecula are returned under the head of non-malignant new growths. Seven in-door and 75 out-door patients were treated for pterygium and five out-door for pinguecula during the year.

Of the 9,955 cases treated, 3,243 were for affections of the conjunctiva, which are classified in Table A given below :—

TABLE A.

	In-door.	Out-door.	Total.
144. Ecchymosis of conjunctiva	..	42	42
145. Chemosis of conjunctiva	..	3	3
147. Conjunctivitis	..	70	70
(*a*) Catarrhal ophthalmia	40	1,901	1,941
(*b*) Purulent ophthalmia	2	34	36
63. Ophthalmia of new-born infants	1	16	17
(*d*) Phlyctenular ophthalmia	1	98	99
(*e*) Chronic ophthalmia	4	278	282
(*f*) Granular ophthalmia	34	708	742
(*g*) Xerophthalmia	..	3	3
Cyst of conjunctiva	1	7	8
Total ..	83	3,160	3,243

Diseases of the Cornea.—There were 677 cases admitted for various affections of the cornea and these are classified in Table B shown below :—

TABLE B.

	In-door.	Out-door.	Total.
149. Keratitis, simple	2	37	39
c. Keratitis, suppurative	7	42	49
d. Keratitis, interstitial	4	34	38
150. Ulcer of cornea	22	144	166
154. Opacity of cornea	43	264	307
155. Staphyloma of cornea	21	57	78
Total ..	99	578	677

Admissions during 1894 for ulcers of the cornea and suppurative keratitis show an increase of 20 of the former and 11 of the latter compared with that of the previous year.

Diseases of the Iris.—There were 187 cases of diseases of the iris which are classified in Table C. Synechiæ posterior shows a large increase in number from 81 in 1892 to 124 in 1894. Syphilitic iritis, which, in previous years, was shown under the head of diseases of the iris, has not been included as it is returned under the head of general diseases.

TABLE C.

	In-door.	Out-door.	Total.
161. Simple iritis	6	50	56
162. Synechiæ	26	98	124
Kerato iritis	1	6	7
Total ..	33	154	187

Diseases of the Lens.—Out of the 1,565 cases which sought relief in the Out-patients' department, 1,249 cases were admitted into hospital; the remaining cases not being ready for operation were advised to return after the lapse of a few months, when the cataracts would be more mature.

At the end of the year 1893, 26 cases of cataract remained under treatment and 1,090 extractions were performed in 1894. Of these numbers 1,004 were successful, 7 relieved, 102 failed and 3 remained under treatment.

Excluding the 3 cases that remained at the end of the year and the cases of dislocation of lens and traumatic cataract, the results of extractions of lens show a percentage of 91·20 of success.

TABLE D.

Cases of Extraction of Lens.	Remained.	Admitted.	Successful.	Relieved.	Failed.	Remaining on 31st December 1894.
182 (c) Nuclear cataract ...	18	651	599	3	64	3
(e) Hard do. ...	7	259	239	1	26	...
(f) Soft do. ...	...	24	24	...	...	...
(g) Lamellar do. ...	...	23	21	...	2	...
(i) Traumatic do. ...	...	15	10	1	4	...
(k) Morgagnian do. ...	...	109	106	...	3	...
(l) Capsular do. ...	...	2	1	...	1	...
Dislocation of lens ...	1	7	4	3	2	...
Total ...	26	1,090	1,004	7	102	3

The soft and morgagnian cataracts gave the largest percentage of success. Twenty-four of the former operated on, all were successful and of 109 of the latter, only three proved unsuccessful from suppurative keratitis. Iridectomy was more freely resorted to than in previous years. In 190 cases out of the 1,116 extractions this operation was performed, owing to premonitory glaucomatous symptoms, adhesions of iris, bulky lenses or contracted pupils which would not yield to atropine. The capsule of lens was removed in 56 cases at the time of the operation and was torn by Bowman's needle in 60 other cases at some time subsequent to operation. The vectis was used in 30 cases for removal of the lens. Vitreous was lost in 82 cases.

The following table shows the causes of failure in extractions of lenses for cataract :—

TABLE E.

Variety of cataract.	Causes of failure.							Total.
	Iritis.	Suppurative keratitis.	Panophthalmitis.	Collapse of eye-ball.	Secondary glaucoma.	Hæmorrhage.	Deep-seated disease.	
Nuclear	25	25	5	1	6	1	1	64
Hard	8	13	...	1	...	3	2	26
Soft	...	...	...	...	...	...	...	...
Lamellar	2	...	...	...	...	...	...	2
Traumatic	4	...	...	...	...	...	...	4
Morgagnian	...	3	...	...	...	...	...	3
Capsular	1	...	...	...	...	...	...	1
Dislocation of lens	1	...	...	...	1	...	...	2
Total ...	41	41	5	2	7	3	3	102

Iritis and suppurative keratitis caused 82 out of 102 failures.

The following table shows the cases of glaucoma :—

TABLE F.

	In-door.	Out-door.	Total.
Simple glaucoma	...	...	...
Acute glaucoma	26	55	81
Chronic glaucoma	71	219	290
Secondary glaucoma	1	21	22
Total ...	98	295	393

Of the 303 cases of glaucoma that applied for treatment, 153 cases were operated on, and of this number 109 were cured, 41 relieved and 3 remained under treatment at the end of the year. Of the remaining cases the majority applied so late for treatment that nothing could be done to them, there being no perception of light.

TABLE G.

Disorders of vision.	In-door.	Out-door.	Total.
193 (a) Myopia	7	131	138
(b) Hypermetropia	..	17	17
c_1 Myopic astigmatism	1	1	2
c_2 Hypermetropic astigmatism	..	2	2
Mixed astigmatism	..	1	1
(d) Presbyopia	..	25	25
194. Asthenopia	2	8	10
207. Amblyopia	11	23	34
Total ..	21	208	229

Cases of refraction are examined every Wednesday, and the number of patients who apply to be suited with spectacles is steadily increasing every year. There were 169 refraction cases examined and suitable prescription of lenses given, to enable them to improve their otherwise imperfect vision.

Diseases of the optic-nerve and retina are shown in Table H.

TABLE H.

	In-door.	Out-door.	Total.
172. Atrophy of optic papilla	3	19	22
175. Optic neuritis	1	4	5
181. Retinitis pigmentary	..	1	1
63. Glioma of retina	..	1	1
Choroido-retinitis	..	1	1
198. Night blindness	2	36	38
Total ..	6	62	68

TABLE I.

Squint and ocular paralysis.

	In-door.	Out-door.	Total.
211. Squint	3	9	12
Paralysis of third nerve	..	3	3
Paralysis of seventh nerve	..	4	4
Paralysis of third, fourth and sixth nerve ..	..	7	7
Total ..	3	23	26

Tenotomy for squint was performed in two cases with good result.

Tumours of orbit and lid are shown in Table J given below :—

TABLE J.

	In-door.	Out-door.	Total.
Fibroma of cornea and orbit	1	6	7
Lipoma of orbit	..	1	1
Papilloma of lid	..	2	2
Sarcoma of orbit	1	5	6
Hygroma of orbit	1	7	8
Cyst of conjunctiva	1	3	4
Glioma of retina	..	1	1
Carcinoma of orbit	..	8	8
Total ..	4	33	37

Of these tumours, 4 cases of fibroma of cornea and orbit, 1 of lipoma, 1 of papilloma of lid, 2 of sarcoma of orbit and 8 of hygroma were operated on and the tumours removed.

MILITARY SICK.

Twelve European soldiers and 35 sepoys were admitted for treatment during the year as recorded in Table K.

Functional amblyopia occurs chiefly among young sepoys serving in Burma. Eleven cases were treated during the year. I have found cases of amblyopia improving in vision soon after their arrival in India, and they are fit to return to duty, in most cases, within six months.

Table K shows the diseases amongst the European and Native soldiers admitted into the Ophthalmic Hospital, Madras, during the year 1894 :—

TABLE K.

	European Soldiers.	Native Sepoys.
Gonorrhœal ophthalmia	1	..
Chronic ophthalmia	..	2
Granular ophthalmia	..	2
Opacity of cornea	1	..
Syphilitic iritis	..	1
Synechiæ	2	1
Cataract	1	1
Traumatic cataract	..	1
Irido-choroiditis	..	1
Atrophy of optic papilla	..	1
Optic neuritis	1	2
Myopia	1	..
Myopic astigmatism	..	1
Asthenopia	..	11
Amblyopia	..	1
Night blindness	1	3
Disorganisation of eyeball	1	..
After enucleation	..	1
Foreign body	..	1
Observation and no appreciable disease	..	
Total ..	12	35

Operations.—1,816 major and 403 minor operations were performed during the year, which shows an increase of 12 of the former and a decrease of 20 of the latter as compared with the previous year. Extraction of lens for cataract, iridiotomy for glaucoma, suppurative keratitis and ulcer of cornea, artificial pupil and division of the canaliculus were the principal major operations performed.

TABLE L.

List showing the results of Major Operations performed during the year 1894.

Disease for which operations were performed. No.	Names.	Nature of operation according to Circular No. 31, dated 24th May 1872.	Remained on 31st Dec. 1894.	Performed during the year.	Total.	Result. Cured.	Relieved	Discharged otherwise.	Died.	Remaining under treatment.	Remarks.
Group A. IV.	29b. Secondary syphilis—Synechiæ.	Artificial pupil ...	...	45	45	36	9	...	...	...	All the operations were performed by the Superintendent, Ophthalmic Hospital.
	62. Pterygium ...	Transplantation ...	...	34	34	34	...	...	...	...	
	62. Pterygium ...	Artificial pupil ...	...	12	12	9	3	...	...	...	
Group D.	62 civ$_1$ Fibroma of cornea and orbit.	Excision ...	...	4	4	4	...	...	...	...	
	62 civ$_2$ Lipoma of orbit.		...	1	1	1	...	...	...	...	
	62 civ$_{13}$ Papilloma of lid.		...	1	1	1	...	...	...	...	
	63$_{17}$ Sarcoma of orbit.		...	2	2	2	...	...	...	...	
	Hygroma of orbit ...		...	8	8	8	...	...	...	...	
149 (*c*)	Suppurative keratitis.	Paracentesis ...	...	7	7	7	...	...	...	...	
...	Suppurative keratitis.	Iridectomy ...	...	47	47	31	15	...	...	1	
150	Ulcer of cornea ...	Iridectomy ...	...	34	34	27	7	...	...	...	
154	Opacity of cornea ...	Artificial pupil ...	1	112	113	35	77	...	...	1	
155	Staphyloma of cornea.	Excision of eyeball.	...	14	14	14	...	...	...	...	
158	Staphyloma of sclerotic.	Iridectomy ...	...	4	4	...	4	...	...	...	
169 *c*	Choroiditis, suppurative.	Excision of eyeball.	...	8	8	8	...	...	...	...	
171 b_1	Acute glaucoma ...	Iridectomy ...	...	56	56	43	13	...	...	...	
171 b_2	Chronic glaucoma ...		...	88	88	66	19	...	...	3	
171 *d*	Secondary glaucoma.		...	6	6	...	6	...	...	...	
...	Do. ...	Puncture of the globe.	...	3	3	...	3	...	...	...	
182 *a*	Nuclear cataract ...	Extraction of lens.	18	651	669	599	3	64	...	3	
e	Hard cataract ...		7	259	266	239	1	26	...	...	
f	Soft cataract ...		...	24	24	24	...	...	...	...	
g	Lamellar cataract ...		...	23	23	21	...	2	...	...	
i	Traumatic cataract.		...	15	15	10	1	4	...	...	
i	Do. ...		...	6	6	...	6	...	...	...	
k	Morgagnian cataract.	Iridectomy ...	...	109	109	106	...	3	...	...	
2	Capsular cataract ...	Extraction of lens.	...	2	2	1	...	1	...	...	
182	Occlusion of pupil ...	Do. ...	...	5	5	2	3	...	...	...	
182	Soft matter after cataract operation.	Iridectomy ...	...	24	24	24	...	...	...	...	
182	Opaque capsule ...	Removal	...	60	60	59	1	...	...	...	
...	Opaque capsule ...	Laceration ...	...	14	14	12	2	...	...	...	
184	Dislocation of lens...	Removal	1	7	8	4	2	2	...	...	
190	Panophthalmitis ...	Extraction of lens.	...	7	7	7	...	...	...	...	
211	Squint	Excision of eyeball.	...	2	2	2	...	...	...	...	
222	Stricture of nasal duct.	Tenotomy ...	6	109	115	49	62	...	...	4	
		Division of canaliculus and passage of probes.	...	5	5	5	...	...	...	...	
233	Trichiasis	Removal of hair bulbs.	...	7	7	6	1	...	...	...	
		Plastic operation...	...	1	1	1	...	...	...	...	
234	Entropion	Plastic operation...	...								
238	Symblepharon ...	Total ...	33	1,816	1,849	1,497	238	102	...	12	

(Signed) T. H. POPE, M.D., B.SC., Surgeon-Major,
Superintendent, Ophthalmic Hospital.

MADRAS,
13*th May* 1895.

No. 5.—GOVERNMENT LEPER HOSPITAL.

ANNUAL REPORT OF THE GOVERNMENT LEPER HOSPITAL FOR 1894.

ADMINISTRATION REPORT.

The total amount expended during the year was Rs. 29,424–5–11 against Rs. 38,556–4–4 of the previous year: the decrease is owing to the less number of patients treated during the year.

The average cost per head is As. 3–11 as against As. 5–8 of the previous year. The decrease is due to the correct method of calculation adopted this year. In previous years, the average cost of each diet for Europeans and Natives is separately taken from the daily registers of dieting for each month and totalled for twelve months, and each total is then divided by twelve (the number of months in the year). The two quotients thus obtained are again taken and the average struck between these is the average cost of European and Native diets together which comes by this method to As. 5–7. But this year the method of calculation as suggested by the Surgeon-General was adopted, viz., dividing total cost of diet by the aggregate number of the daily sick after deducting the criminal population who were dieted at jail cost.

There are no paying patients in the hospital.

The night-soil was hitherto removed by a contractor on a monthly payment of Rs. 25, including the supply of dry earth. From 1st September 1894 the Surgeon-General arranged with the municipality for the removal of the night-soil, which resulted in a saving of Rs. 23 per mensem; the balance of Rs. 2 is spent for the supply of dry earth.

General Remarks.—The service books and the inventories of valuable stock have been duly kept up and verified up to 31st December 1894.

The tables that were not recorded for last year will be done so this year, and duly reported in the next annual report.

PROFESSIONAL REPORT.

Locality.—The hospital is situated in Washermanpett near Black Town, and it consists of six blocks containing 136 beds for native males, three blocks consisting of 24 beds for European males. The blocks for females are separated from those of males by an enclosure which consists of two blocks, one for natives and the other for Europeans, containing 28 and 16 beds respectively. The blocks are at a distance of about 50 feet from one another. It also contains a block for criminal lepers with 22 beds and it is enclosed by zinc paling. There are grass plots and flower gardens within the hospital entirely looked after by the patients themselves. The sanitation of the hospital and the ventilation of the blocks is quite satisfactory. But with regard to accommodation, &c., the native female ward is the only ward that has been overcrowded since 1889, and the matter was reported to the Surgeon-General with the Government of Madras. As there was no site to build another ward within the premises of the hospital, it was proposed then to build another hospital beyond municipal limits. The Surgeon-General decided that this proposal should lie over until such time as the financial condition improves. The Surgeon-General, during his inspection on 29th May 1894, observed the overcrowding of the native female ward and ordered that it should be reported on and proposed, if another hospital could not be built now, an upper storey should be built up over the European female ward to meet the present overcrowding. This estimate went beyond Rs. 500, and the Surgeon-General was of opinion that Government should not be troubled until such time as the financial condition improved. Overcrowding is, however, remedied by putting extra beds in the verandah and also by admitting only very bad cases into that ward.

Statement showing the Details of overcrowding in the Native Female Ward.

Ward.	Superficial area.	Cubic area.	Number of beds in ward.
	SQ. FT.	C. FT.	
Native female ward	1,790	23,220	28

This gives 60 square feet and 830 cubic feet to each patient in the ward, but 19 extra beds have been placed on the floor in the verandahs of this ward and are occupied.

The historical review, etiology, pathology and prognosis of the disease have been already ably reported upon by my predecessor Surgeon-Major D. R. Thompson, M.D., in his annual report of 1881. I agree with all what Dr. Thompson has therein stated, and especially with the opinion that the disease is *contagious*,* but not *infectious*, and that it is hereditary as ample proofs shown both in Dr. Thompson's report and from cases in this hospital now. Leprosy is undoubtedly contagious, *i.e.*, inoculable, if the blood of a leper be injected into the blood of a healthy person whether by direct inoculation, vaccination, sexual intercourse or what not. Leprosy will undoubtedly be developed, but the mere intermingling of healthy persons with lepers is innocuous; this is well borne out by so many proofs in this hospital where so many servants have attended lepers, dressed their ulcers, &c., and have not shown any sign of leprosy for many years. I have been in charge of lepers for nearly twenty years of my service, and I have not yet seen a case of a healthy person developing leprosy from direct *infection*.†

The total number of patients treated during the year was 470 against 510 of the previous year, showing a decrease of 40. The daily average number of Europeans has been 28·18, showing the decrease of 2·54 when compared with previous year, and that of the natives has been 190·54 against 206·63 of the previous year. The decrease may be attributed to the native patients leaving the hospital during the harvest time to their native places and returning at the time of scarcity.

Out-door patients.—The number of Europeans and natives treated has been 8 and 50 respectively against 4 and 53 of last year, and the daily average attendance of both classes was 8·39.

The number of deaths this year has been 51 against 72 of the previous year; 8 of them were admitted in a moribund state and they died within a month, and 4 were taken by their relatives in a moribund state.

Statement showing the complications of leprosy from which they died during the last five years.

Diseases.	Years.				
	1894.	1893.	1892.	1891.	1890.
Diarrhœa	13	20	30	15	30
Dysentery	11	15	22	6	4
Ascites	4	...	...	...	...
Ulcers	13	9	10	5	...
Phthisis	3	...	...	...	...
General dropsy	6	14	16	11	7
Abscess	1	...	...	...	...
		5	3		

Treatment.—I have made several experiments for this disease with little success since I took charge of this hospital. Koch's lymph, ichthyol, resorcin, salol and thyroid body of the sheep have been tried and their reports were duly submitted to the Surgeon-General. Oleum gynocardium is used here both internally and externally; it not only checks the further progress of the disease, but also relieves the patients to a marked extent. It helps in healing up the anæsthetic ulcers, eradicates skin eruptions, such as psoriasis and eczema. Many of the patients do not like this oil, as it has a peculiar strong odour and nauseous taste and it is of thick consistency; hence I have been using, since last year, oleum hydrocarpus wightiana, which belong to the same family and it has a very similar effect on the disease. This oil is less nauseous, has a similar smell to other oils, and the patients prefer taking this oil to the other, as it is more palatable and the effect is equally good.

* Surgeon-Major D. R. Thompson, M.D., remarks on 'Contagion' as follows:—
Contagion.—After having considered all that has been said for and against this point, and carefully read the series of proofs that have been collected by Dr. Munro, who has so ably investigated the matter, I have no doubt in my own mind that the disease is contagious. Like that author, too, I believe that it can be conveyed more easily by inoculation, but that by long continued contact and intimate intercourse and association, such as occurs in families living together, the disease can occur also independent of inoculation.
Vide page 141 of the annual report on the Civil hospitals and dispensaries in the Madras Presidency for the year 1881.

† In this connection it has been considered desirable to print below the conclusions of the Leprosy Commission in India 1890–91—
1. Leprosy is a disease sui generis; it is not a form of syphilis or tuberculosis, but has striking ætiological analogies with the latter.
2. Leprosy is not diffused by hereditary transmission, and for this reason and the established amount of sterility among lepers, the disease has a natural tendency to die out.
3. Though in a scientific classification of diseases, leprosy must be regarded as contagious and also inoculable, yet the extent to which it is propagated by these means is exceedingly small.
4. Leprosy is not directly originated by the use of any particular article of food, nor by any climatic or telluric conditions, nor by insanitary surroundings; neither does it peculiarly affect any race or caste.
5. Leprosy is indirectly influenced by insanitary surroundings such as poverty, bad food, or deficient drainage or ventilation, for these by causing a predisposition increase the susceptibility of the individual to the disease.
6. Leprosy in the great majority of cases originates *de novo*, that is from a sequence or concurrence of causes and conditions, dealt with in the report and which are related to each in ways at present imperfectly known.

APPENDIX.

TABLE I.

Cases according to form of disease.

Class of patients.	Remained.			Admitted.		
	Anæsthetic.	Tubercular.	Mixed.	Anæsthetic.	Tubercular.	Mixed.
Europeans	13	15	4	3	6	...
Natives	127	30	35	114	57	37

TABLE II.

Ages at which Leprosy appeared and arranged in quinquennial periods.

Class of patients.	5 years or under.	6–10 years.	11–15 years.	16–20 years.	21–25 years.	26–30 years.	31–35 years.	36–40 years.	41–45 years.	46–50 years.	51–55 years.	56–60 years.	61–65 years.	66–70 years.
Europeans ...	2	5	16	4	5	3	1	2	2	...	1	...	...	...
Natives ...	28	21	37	46	56	44	52	50	20	25	9	8	3	1

TABLE III.

Cases on which the disease commenced before the age of 10 years arranged according to sex.

Class of patients.	5 years or under.		6 to 10 years.	
	Males.	Females.	Males.	Females.
Europeans	2	...	2	3
Natives	13	15	15	6

TABLE IV.

Family Taint confessed.

—	Europeans.	Natives.	Total.
Father affected	...	37	37
Mother affected	2	18	20
Father and mother affected	...	1	1
Father's father affected	...	12	12
Mother's father affected	...	3	3
Father's mother affected	...	...	...
Mother's mother affected	...	...	...
Uncle affected	...	25	25
Aunt affected	...	3	3
Cousin affected	2	4	6
Other relatives affected	7	22	29
Unknown affected	30	275	305

TABLE V.

Analysis of cases where a family taint in the direct line could be traced through more than one generation.

Not recorded during the year.

TABLE VI.

Instances where two or more Children were lepers, but their parents healthy.

Class of patients.	Number of cases.
Europeans	Not recorded during the year.
Natives	

TABLE VII.

Cases where Father and Mother were lepers at the time of marriage.

Class of patients.	Number of cases.
Europeans	Not recorded during the year.
Natives	

TABLE VIII.

Condition of Children born after the manifestation of the disease in parent or parents.

Class of patients.	Number of children born.	Number affected.
Europeans	Not recorded during the year.	
Natives		

TABLE IX.

Condition of the Brothers and Sisters of leprous parents with a true history of heredity.

Class of patients.	Number of patients actually born of leprous parents.	Number of their brothers and sisters.	Number of these affected.
Europeans...	Not recorded during the year.		
Natives			

TABLE X.

Condition of Brothers and Sisters of leprous patients whose parents remained healthy.

Class of patients.	Number of patients with such history.	Number of their brothers and sisters.	Number of these affected.
Europeans	Not recorded during the year.		
Natives			

TABLE XI.

Children born before and after the manifestation of the disease in parent or parents.

Class of patients.	Children born before the appearance of leprosy in parent.	Children born after the appearance of leprosy in parent.	Total number of children.
Europeans ... ... } Natives ... ... }	Not recorded during the year.		

TABLE XII.

Marriages.

Class of patients.	Number of sterile marriages.	Marriages with issues.		Number of couples the children of which were born before the appearance of the disease in the parent.	Total number of marriages.
		Between two lepers.	Between a healthy person and a leper.		
Europeans ... ... } Natives ... ... }	Not recorded during the year.				

TABLE XIII.

Table showing the fertility of leprous couples (both husbands and wives being lepers).

Class of patients.	Number of leprous couples.	Number of such without any issue.	Remarks.
Europeans ... ... } Natives ... ... }	Not recorded during the year.		

TABLE XIV.

Table showing the relative sterility of couples where the husband is a leper and the wife healthy.

Class of patients.	Total number of such couples.	Number of those which are sterile.	Number of those which have children.	Number of children.
Europeans ... ... } Natives ... ... }	Not recorded during the year.			

(Signed) H. D. COOK, M.B., Surgeon-Lieut.-Colonel,
Superintendent, Government Leper Hospital.

MADRAS,
31*st January* 1895.

No. 6.—VOLUNTARY VENEREAL HOSPITAL.

ANNUAL REPORT OF THE VOLUNTARY VENEREAL HOSPITAL FOR 1894.

ADMINISTRATION REPORT.

1. *Establishment.*—There has been no change since last report, but an increase is expected in 1895, *i.e.*, one hospital assistant and one compounder, also two female ward attendants sanctioned in G.O., No. 690, Public, dated 19th September 1894.

2. *Buildings, &c.*—The buildings are extensive and in good order. The usual repairs, limewashing, &c., have been carried out.

3. *Financial Statement.*—The total expenditure of the hospital for the year under notice including all salaries, repairs to buildings, diets, &c., was Rs. 12,509-4-0 as compared with Rs. 12,500-15-10 in the previous year. For details regarding these amounts see Statement V, Part I.

4. The average cost of each diet for Europeans and Natives combined was As. 3-11$\frac{1}{3}$ pies.

5. The amount shown under miscellaneous charges, column 4 E., is as follows:—

	Rs.	A.	P.
Contingencies	111	8	0
Bedding and clothing	709	11	6
Miscellaneous charges	42	1	6
Hospital necessaries	269	2	8
Stationery	6	6	9
Printing, &c.	10	10	0
Assessment paid	320	4	0
Registers and forms from Principal Medical Storekeeper	0	4	9
Treasury remittances	26	4	0
Total ..	1,496	5	2

6. The inventory of the valuable stock of this hospital has been checked on 22nd January 1895 and found correct.

7. First-class Hospital Assistant Ranganathum continues to work very well; he is a zealous and painstaking man.

8. The Matron, Mrs. M. Bryan, has worked satisfactorily.

9. The Storekeeper, A. B. Vijayarunga Mudaly, has also given much satisfaction.

10. The minor servants worked well.

11. The orders respecting the custody of poisonous drugs, &c., issued by the Surgeon-General in Circular No. 28 of 4th October 1889, are carefully carried out.

12. In reference to Circular No. 23 of 31st July 1888 all service books have been maintained.

PROFESSIONAL REPORT.

1. *Sickness and Mortality.*—The total number of admissions for the year was 662 with 17 deaths. The various races and castes were as follows:—

Europeans 25, deaths 3.
Eurasians 24, deaths none.
Muhammadans 35, death 1.
Hindus 578, deaths 13.

The chief diseases were as follows:—

Syphilis, primary		10
Syphilis, constitutional.	Ulcerative and destructive	375
	Inflammatory and exudative	60
Gonorrhœa		217

2. There was an increase of 11 patients as compared with the previous year and an increase in the mortality of 2.

3. *Different phases of the Syphilitic Poison—Character of cases.*—Under the head *ulcerative and destructive* 375 cases were registered. The sores were of all sizes, the seat of the ulceration being chiefly in the vagina, labia, fourchette and urethra. Some of the vaginal sores had undermined edges, and some were of immense size. Many cases were well-marked specimens of sloughing phagedæna, in some cases the whole of the genital organs being destroyed. These ulcers, after sloughs have separated, present a ragged and gnawed appearance, the constitutional symptoms being severe, terrible pain, great depression and exhaustion accompanying them. Many of these cases only reach hospital when disease is far advanced and great exhaustion is present.

4. *Inflammatory and exudative.*—Sixty cases were admitted, where secondary symptoms were present, exudations, such as thickened patches and discolourations appearing all over the body, in many cases scaly patches and rupia, ulceration of tongue and throat. Syphilitic diseases of the periosteum were frequently seen chiefly over the tibia, but also over clavicle, sternum, and on the hands and forearms. These cases were accompanied by severe pain, especially at night. Swelling from deposit of gummy material beneath the periosteum sometimes softens and breaks down leaving nasty sores. Several cases of diseases of the nails were noted, the nails becoming ridged and thickened. Only a few cases of diseases of the eye were observed. Complications were common, some cases having syphilitic eruptions, gonorrhœa, bubo, warts, &c., all at the same time.

5. *Local Non-syphilitic Venereal Diseases.*—The only cases of local non-syphilitic diseases were enlargements and occasional abscess of labia, erosion of os uteri, sometimes present in a severe form.

6. *Diseases and Complications due to Gonorrhœa.*—Gonorrhœa comes next as regards numbers, 217 cases having come under notice. Here also the disease is seldom seen in a very early stage and the discharge is profuse and inflammation extends generally from the forepart of the vagina to the uterus. The urethra is often affected. In the cervix uteri it is very difficult to cure. Abscesses sometimes form in the labia and clitoris from irritation of discharges, &c. Urethritis often causes great agony relieved by copaiba, various injections, opiates, diluents, fomentations, &c., and in the chronic cases caustic solutions are useful, Many cases of erosion of the os uteri were probably owing to irritation of discharges. Gonorrhœal rheumatism, as a complication, was noticed in several cases, generally in the last stage of gonorrhœa when the discharge was becoming white and thin; in some cases the joints are affected and the muscles of thighs and arms. Pains severe at night. Fomentations, alkalies, salines, purgatives, belladona, opium, &c., gave relief. Warts also came under notice. I have seen them extend over the whole of the external parts. They are sometimes very painful and require soothing applications. Tinct. ferri perchloridi applied daily, has a good effect. Very few cases of ophthalmia came under notice.

7. The average daily sick for the year under notice was 65·75.

8. The largest number in hospital was on 9th January 1894, *i.e.*, 88.

9. *Mortality.—I. Ulcerative and destructive.*—Miss Mary Reid, aged 26, admitted on 18th November 1893. She was a very weak and emaciated woman, suffering from phagedænic ulceration involving the whole of the genital organs, which was not in any way amenable to careful treatment and, with all the nourishment possible she gradually sank and died of exhaustion on 27th January 1894.

II. Gonorrhœa.—Mrs. Jane Coultrup, aged 38, admitted 25th June 1894, a very feeble broken-down patient, almost skin and bone, suffering from chronic pneumonic phthisis, œdema of lower extremities, diarrhœa, &c.; died of exhaustion on 19th November 1894.

III. Dysentery.—Wylie, admitted under head of gonorrhœa. Suffered from profuse chronic discharge for years. Most obstinate case. Died from an attack of acute dysentery on 2nd December 1894.

IV. Gonorrhœa.—C. Thayaroo, aged 23, admitted 15th February 1894. Suffered from chronic dyspepsia and was in a very feeble state, the result of exhaustive discharges, exposure, bad food, &c. She died from exhaustion, the result of intestinal catarrh.

V. Ulcerative and destructive.—Manickum, aged 22, admitted 15th March 1894. She was a thin miserable woman. She was very often in and out of hospital, was suffering with phagedænic ulceration extending from mons veneris to the rectum with putrid sanious discharge. This time she was brought into hospital in a very bad state and died from exhaustion on the 26th March 1894.

VI. Ulcerative and destructive.—Poongavanum, aged 25, admitted 9th April 1894. She was admitted with extensive ulceration of the urethra attended with incontinence of urine and shattered health resisting almost all treatment. Lastly diarrhœa set in and she died of intestinal catarrh on the 27th May 1894.

VII. Gonorrhœa.—Sakeenah, aged 23, admitted 4th June 1894. She is an old prostitute, who was brought in a very bad state. She was very wasted, suffering from looseness of bowels and died of intestinal catarrh a few days after admission on the 7th June 1894.

VIII. Ulcerative and destructive with open buboes.—Chinnammah, aged 30, admitted 6th June 1894. She was a very weak and emaciated woman, a mere skeleton; with all our endeavours the phagedænic ulceration would not yield to treatment. She died from exhaustion on 2nd August 1894.

IX. Gonorrhœa.—Mooniammah, aged 28, admitted 27th July 1894. She was brought into the hospital in a bad state of health suffering from profuse putrid discharge and also indigestion and diarrhœa of a chronic nature. She did not rally, but gradually sank and died of intestinal catarrh on the 13th September 1894.

X. Ulcerative and destructive.—Mooniammah, aged 28, admitted 31st July 1894. She was a thin feeble woman, had skin of a shining coppery colour with scaly eruptions all over the body, and complained of a severe pain over the left side of chest. On examination aortic disease was diagnosed. Subsequently a few days after she commenced to bleed profusely from nose and mouth. This was arrested and a few days after diarrhœa set in, and she died on the 13th September 1894 from exhaustion.

XI. Ulcerative and destructive.—K. Thoye, aged 30, admitted 15th August 1894. She was a weak and emaciated woman, transferred from the Women and Children's Hospital, suffering from extensive ulceration of the vagina, attended by fever and diarrhœa. She resisted all treatment and died of exhaustion within a few days after admission on the 24th August 1894.

XII. Ulcerative and destructive.—Rajammah, aged 26, admitted 10th September 1894. Admitted with an extensive ulceration involving both labia and vagina, attended with swelling of lower extremities, pain in the lumbar region; the urine was scanty, of a dark smoky colour; and containing albumen. She gradually got weaker and died on 30th September 1894 from chronic albuminuria and exhaustion.

XIII. Inflammatory and exudative.—Ammoyee, aged 25, admitted 9th October 1894. A very feeble woman suffering for six months with syphilitic eruptions all over the body. Much exhausted by attacks of fever and diarrhœa. Cause of death, intestinal catarrh and exhaustion.

XIV. Ulcerative and destructive.—Mooniammah, aged 25, admitted 13th October 1894. A weak and emaciated woman suffering from extensive ulceration of the vagina, swollen feet with small ulcers over both ankles from which a sanious discharge was oozing. She had no inclination for food; pain in lumbar region; urine of high colour, scanty and smoky, albuminous. She grew worse and melæna set in, and she died on the 25th October 1894 from chronic albuminuria and exhaustion.

XV. Gonorrhœa.—B. Thoyee, aged 35, admitted 27th October 1894. She was an old registered prostitute, was frequently in hospital. She was saturated with syphilitic poison and her constitution was shattered. She was hardly able to walk, and she died on the 2nd December 1894 of exhaustion.

XVI. Ulceratire and destructive.—Moothamma, aged 25, admitted 14th November 1894. An old registered prostitute, was often in hospital. The urethra was partly destroyed, the urine dribbled away. This patient was of weak intellect probably from syphilitic brain disease. She died of exhaustion on the 12th December 1894.

XVII. Ulcerative and destructive.—Ummanee, aged 30, admitted 24th November 1894. The woman was brought in a moribund state, previously weakened by attacks of continued fever; the feet are much swollen; large phagedænic ulcer in the vagina; nose much swollen and nodulated; soreness of the mouth (aphthæ). She never recovered her consciousness, and she died of exhaustion on the 30th November 1894.

On the whole, I consider it most difficult to check the spread of syphilis under the present system. The Lock Hospital was a great means of preventing the spreading of disease among the civil and military population. Under the present system women, as a rule, come in only when disease is very far advanced, and leave hospital when they please, often before the cure is complete.

(Signed) A. L. HACKETT, Brigade-Surgeon-Lieut.-Colonel,
Superintendent, Voluntary Venereal Hospital, Madras.

Public Department. a

5.

Note

94

With reference to the H.M'

note marked (A) it is submitted that u

1890 the reports on State Hospitals an

Civil Hospitals and Dispensaries were

submitted together, but in its letter

recorded in G.O. dated 19th January 18

No. 38, India requested that they migh

be prepared separately in future.

The report on State Hospitals

for 1891 was the first under the new

system and the appendices referred to b

the H.M. were introduced for the first

time - vide para. 10 of the Surgeon-

General's letter No. 585, dated 5th

August 1893, marked with red tape in t

volume. The Appendices have been repe

since, but the reports they are conti

are not submitted in accordance with a

orders.

A copy of the Calcutta repo

on Medical Institutions for 1893 is pu

up. It is complete in itself and cont

no subsidiary papers. No copy of the

Bombay

Note.
The reports make the accounts reports complete; & gives them a place to be printed in. They are no doubt of great value to Medical admin officers, as showing the relation between the admin of the Hospital & the actual work carried on in it. I know they were read with great interest by the S.G. with the G. of I. who originates the Hospital reviews & these reports

Bombay report is available.

As regards the fall in the rice of provisions attention is invited to the statement attached. No percentage can be given in the case of diets as a whole, but the prices of the principal ingredient rice, are known.

The H.M's. attention is invited to para. 4 of the revised draft No direct remarks by India on the substitution of bazaar for European medicines can be traced.

What I was thinking of was para 2 of Mr Hewett's letter of 27/9/94 No 592 in S.C. 341 4.5.95 HH

In regard to the average cost of diets, it is submitted that the various figures given in different parts of the report are confusing. Taking the report itself as the matter with which the Govt. has to deal attention is invited to the figures in Col. 6 at page 31. These were reproduced in the original draft and compared with figures in the reports for the two preceding years. The average cost of Native diets in the Lying-in Hospital in 1896 was unfortunately omitted in copying.

Turning to the subsidiary reports for this year it will be seen at Appendix A, page 80, gives the following averages for diet in the General wards of the General Hospital.-

		Calcutta
Europeans.....	0-7-8¼	-9-0
Natives.....	0-3-9¼	-0-5.

and Col. 6 Appendix C page 83 shows the average cost of each diet to be 0-6-1¾ as against 0-6-3 given by the Surgeon-General.

The report of the Women and Children's Hospital contains no details in regard to the cost of diets. At page 50 the average for the Lying-in Hospital is shown to be.-

European.....0-9- 7
Native.....0-3-10

These figures would give a total average of 0-6-8½ against 0-6-7 quoted by the Surgeon-General.

At page 88 the averages for the Ophthalmic Hospital are.-

European..... 0-7-1
Native..... 0-3-7
or a total average of. 0-5-4

This agrees with the Surgeon-General's figures

Attention is invited to the second para. on page 94 in which the average for the Leper Hospital is given as 0-3-11 as against 0-5-8 in 1893. It is explained, however, that according to the system of calculation followed last year the average would be 0-5-7 for 1894. In para. 4 at page 99 the average cost of each diet for Europeans and

These averages are on reduction of a European & one Native diet. An average for whole hospital would be the no. of European diets x the average Europ. + the no. of Native diets x the average Native diet, or what is the same thing the total cost of diets divided by the total no. of Patients N. The average on a consideration Europ. diet + one Native diet was nothing useful. As the case may be we shall have for the future the two averages - Europ & Native-kept entirely distinct. GR Yes. This is the right way HH as may

Natives combined is given as 0-8-11⅓ as against 0-8-11 noted by the Surgeon General.

It is submitted that the foregoing facts show that the figures given are not reliable for purposes of comparison and that they will not be in future unless distinct orders are issued for a universal method of calculating the averages. It seems very desirable that the cost of European and Native diets should be kept quite distinct and an average given for each. Otherwise a large decrease under one right be counterbalanced by an increase under the other without the Govt. being aware of the change or vice versa. Attention is invited to para. 9 of the revised draft.

With adverience to the H.M's. note on page 9 of the Report in regard to the cost of medicines and diets, it is understood that the H.M. refers to the figures given by India in its letter in G.O. No. 537, dated 25th June last. They related, however, to Civil Hospitals and Dispensaries and not to State Hospitals. India's letter regarding the latter will be found in G.O. dated 4th May 1895, No. 311. The averages

per 100 patients given in it for 1893 :-

	Madras	Calcutta
Bazaar medicines....	5-7-0	1-9-0
European ,, ...	83-3-1	13-0-5.

The statement at page 31 of the current report shows expenditure in 1894 to have been Rs. 488 and Rs. 30,784 # respectively, while para. 5 gives the total number of patients as 96,378; the average per 100 patients for bazaar medicines was therefore only 8 annas against Rs. 32 for European medicines.

No details in regard to the cost of diets in the Calcutta hospitals are given in India's letter but the figures for 1893 will be found at page 86 of the Board report put up. No comparison is attempted as the corresponding institutions are not known.

particular attention is invited to the manner in which the statemen at pages 35 & 36 of the Calcutta report is prepared. There are no receipts in Madras similar to those in Columns c & i on page 35, viz. from Local or other funds and from interest on investments, but there seems no reason why the percentage in Column 7, page 31, of the report under review should not be reduced proportionately by the amount received on account of paying patients (Rs. 31,481) and from

1/2 times the Calcutta expenditure more

must somewhere the difficulty in attempting a comparison

Whole subject is under report by J.G. with reference to G.O. 4/5/95 341. D.S. has been procuring rep. on Calcutta & the Q. whether for the future the rate shd. be struck including or excluding free issue of parts from patients may

ccount of miscellaneous receipts
Rs. 825) instead of their being treated
as ordinary income from the Govt purse.

With reference to the H.M's.
note at the foot of page 37 it is sub-
mitted that the system in force in
Calcutta and Bombay in regard to re-
coveries from patients cannot be ascer-
tained from the papers available.

A revised draft is submitted-
it may require further alteration
in accordance with the H.M's. remarks
on this note.

FDB
21.8.95.

perhaps be decided on
the receipt of the reply
Verywell SJ
HD 28
26/8/95

But the S.G. may find note shd
added to the draft.
SJ
28
I can't make the matter more
HD

H.M.
Please see the revised draft
submitted. When I passed the
original draft I had not seen
the big current files on Dists &
Gen Hosp. reorganisation &c (they being
then in circln) and was unaware
of the important q^ns that have
recently arisen in connection
with Medical Admn.
SJ 28/

of 80 tolas.
Average Presidency prices of food grains in ounces per rupee.

Years	Paddy Second Sort	Cholum	Cumbu	Ragi.
Fasli 1291 (1881-82)	28·5	31·7	30·3	31·9
1292	28·5	32·0	30·3	32·5
1293	28·2	31·7	30·3	32·3
1294	23·5	24·6	23·9	26·6
1295	23·7	24·2	23·7	26·6
1296	27·0	27·7	27·5	29·9
1297	28·0	28·6	27·3	30·9
1298	25·8	26·0	24·6	28·6
1299	23·5	25·6	24·4	27·9
1300	22·4	24·0	23·2	25·9
1301	18·3	17·0	16·5	18·0
1302	18·8	18·2	18·7	19·8
1303 (1893-94)	21·3	19·9	20·0	22·2

	Salt
1890-91	11·3
1891-92	11·5
1892-93	11·7
1893-94	11·8
First 9 months of 1894-95	11·8

Read the following paper.-

Annual Report and Statistics for 1894 of the State Hospitals in the Presidency Town of Madras.

O R D E R

A

The Surgeon-General, in submitting his report on State Hospitals for 1894, explains that in order to show more clearly the work done in, and the relative cost of, each hospital he has adopted a somewhat different system from that of preceding years. ~~The result is satisfactory, and will, no doubt, be still further improved when the rules for a uniform system of accounts have been adopted.~~

2. A comparative statement of the work done and the charges incurred during the past three years in the six State Hospitals is appended.-

Year	No. of patients treated In	out	Total	average daily attendance In	out	Percentage of mortality	Major Surgical operations	Recoveries from paying patients Rs:	Cost of diets Rs:	Total expenditure Rs:
1892	13,185	76,087	89,272	851.71	576.40	6.19	3,498	15,987	102,005	3,49,767
1893	13,194	81,518	94,712	810.26	563.47	5.18	3,417	19,661	109,951	3,64,966
1894	13,863	82,515	96,378	821.38	560.18	5.02	3,355	21,481	106,071	3,53,057

3. Compared with the preceding year there was an increase of 1666 patients and a decrease in the percentage of mortality. The expenditure was less by Rs.11,916 and the cost of diets fell from Rs.109,951 to Rs. 106,071. It appears that the expenditure on bazaar medicines was only Rs: 483 against Rs: 5117 in 1893, ~~reduced by Rs.4,634, which, however,~~ this was principally due to the more correct entry of charges under their proper heads.

1893... ... Rs. 5,117
1894... ... Rs. 483
~~Difference~~ Rs. 4,634

4. In addition to the ~~large number of~~ patients treated in the six State Hospitals it appears from para. 5 of the report that the large numbers of 108,863 received attention in the other private, municipal, aided ~~medical~~ institutions which exist at the Presidency Town. These large numbers evidence the growing popularity of European hospitals and dispensaries. Although 1894 was a comparatively healthy year, there was, ~~however, again~~ a marked increase in the number of cases of malarial fever. The matter will again be brought to the notice of the Sanitary Commissioner. The statement of mortality in para. 9. contains, as remarked by the Surgeon-General, inadequate information. It is hoped that the orders already

Cases in the Genl.Hospl.....6,647
,, W.&C's ,, ... 586
,, Lying-in ,, ... 760
Total No. 7,993

Cases in 1893..... 5,633
,, 1893..... 8,482

The ~~existence~~ ~~cases~~ of septicæmia in the various hospitals should in future reports be fully ~~noticed~~ discussed, & both the relative what proportion of the cases is traceable to conditions arising before the admission of the patient & how far they originated within the hospital

already issued by the Surgeon-General will result in more detailed records being maintained ~~forthcoming~~ in future. The return of 418 cases in the Women and Children's Hospital under the general undefined head of "debility" is ~~most~~ unsatisfactory, but as the officer responsible has retired from the service the Govt. will merely request the Surgeon-General to take steps to prevent such remissness in future.

5. From the statement in para. 4 it appears that altogether 1035 beds were available but the average daily sick numbered only 891. This is particularly noticeable in the case of the Lying-in Hospital, where the 132 beds had on an average only 68 occupants. The Surgeon-General ~~will be requested~~ should be asked to report the largest number of in-patients on any one day at each ~~of the~~ ~~five~~ ~~sick~~ hospitals ~~during 1894. The permanent maintenance of too large a reserve of beds is unnecessary and must involve avoidable expenditure.~~ The Surgeon-General's remark that all the hospitals with the exception of the General "worked fully up to their accommodation" is not borne out by the figures given.

Note.
These remarks are badly necessary without info. as to max. no.; the averages thro'out the year do not give a trustworthy basis for the inferences.

6.

~~The Govt. is pleased to~~

~~notice the Surgeon-General's remarks~~

~~in paras. 11 & 16,~~ details regarding

operations such as were *Embodied* in

para. 6 of the report for 1893 have

not been *afforded*. The

mission should be supplied and the

particulars given in future. Statement

11~~A~~ contains particulars of major

operations, but they have not been

~~summarised~~, nor is anything said in

regard to minor operations.

The average cost of diets

in the different institutions during

the past three years is shown in the

margin. The decrease at the Leper Hos-

pital is due to the ~~diet registers~~

~~being~~ more strictly *maintained* ~~kept up~~ *of the diet registers*.

The Surgeon-General states that the

variations in the cases of other hos-

pitals are not sufficiently *marked* to call for

special ~~remark~~ *notice*. This apparently refers

to the total cost of the diets which

for the past two years was as shown

in the margin. The averages, however,

exhibit ~~a~~ considerable increases at the

Ophthalmic ~~Hospital~~ and ~~a large decrease~~

at the Lying-in Hospital ~~in addition~~ *and*

~~to the reduction at the Leper hospital.~~

The Surgeon-General should explain

these

	1892	1893	1894
	ac: An.	ac: An.	ac: An.
General Hospital	5-11¼	6- 5⅔	6- 8
W. & C's. ,,	5-11	6- 5	6- 8
Lying-in ,,	Eur. 8- 4 / Nat. 8- 8	8- 9	9- 7
Ophthalmic ,,	3- 0½	3- 4	5- 4
Leper ,,	4- 8	5- 8	3-11
Vol.Venereal,,	3-11½	3-11½	3-11

	1893	1894
General Hospital... ...	37,507	39,480
Women & Children's. ...	19,481	19,889
Lying-in ...	16,596	16,47
Ophthalmic ...	5,369	5,36
Leper ...	23,996	18,75
Vol.Venereal ...	7,033	6,36

these variations. ~~The general question~~

of the purchase of diets of is receiving separate consideration.

~~A new feature in the report is the record of cases treated by the Dental Surgeon. Considering the limited period - 1 month and 1 half - during which Mr. Badcock was at work the number of cases attended to by him - viz. 81 - seems large.~~

In regard to the financial side of the report, it is satisfactory to note that the amount paid by Govt. fell from Rs.3,44,679 to Rs. 330,744, although the number of sick ~~cases~~ treated was larger. The recoveries from paying patients, however, rose from Rs. 19,661 to Rs. 21,481. In this connection, the Govt. desires to be furnished with particulars of the use made of the quarters provided for native gentlemen and the amount of fees recovered on their account. The large increase from Rs. 48,588 to Rs. 59, 443 on salaries of Medical Officers is satisfactorily explained; as also is the advance from Rs.28,638 to Rs. 38,646 in the cost of "inferior dispensary establishment" at the General ~~Hospital~~ Hospital. ~~The Surgeon~~

Surgeon

will be
Surgeon-General's attention is invited to para. 5 (g) of Brigade Surgeon Lieut. Col. Price's report(page 36). ~~All~~ establishment which is practically permanentshould be provided for in the proposition statement for the revision of the establishment of the General Hospital, ~~now~~ under preparation in accordance with G.O.dated 1895 No.

10. The Govt. is constrained to ~~remark~~ observe the the report shows that in more than one way there has been mismanagement, or ~~not sufficiently~~ careless supervision, at the Women and Children's hospital. This ~~seems~~ is not ~~to~~ likely to continue, but the Surgeon-General's attention will be directed to the matter.

11. The Govt. has perused with interest the professional reports of the Medical Officers concerned, and particularly notices with satisfaction the success which has attended Brigade Surgeon Lieut.Col. Price's experiment in grass farming, which has resulted already in an additional source of income ~~to the General hospital~~. His remarks in para.5 (b) of his report (pages 36 & 37) will be communicated to the Local and Municipal Dept.

H.E. the Pres.d has recently by G.O. 4/5/95 no 341 P.J. directed the L.G. to make a full & careful inquiry into the cost of medicines as well as into the whole question of the expenditure incurred in the City State Hospitals, and, until the results of the inquiry are before it, the Govt will reserve any further remarks on the financial position of these institutions.

H.E. the Pres.d has read with gratification the high testimony borne by the L.G. to the labours of Surg.-Lt.-Col. Price & Brown & the other medical officers mentioned in paras 11 & 18 of the report.

TO
The Surgeon-General.
,, Examiner of Medical Accounts.
,, Sanitary Commissioner.
,, Financial Department.
,, Accountant General.
Editors' Table.
Local & Mil. dept

Department. The question of revising the charges for the "officers quarters" has already been referred to the Surgeon-General in G.O. dated 95, No. The Senior Medical Officers ~~of Presidency~~ observations (page 38) on the subject have no doubt attracted ~~that~~ their notice. ~~In~~ The statement that the members of the steward's dept. at the General Hospital have to attend from 6-30 A.M. to 6 P.M. daily ~~throughout~~ throughout the year and to take night duty once in six nights should be enquired into ~~by the Surgeon-General~~ and a report submitted. The names of patients who die in the Voluntary Venereal Hospital should be omitted from future professional reports.

12. It is observed that the ~~Surgeon~~ report is dated the 18th June, but it was not recd. in print, till the 16th July.

JDB 24-7-95.

No. for C.

Copy to the Govt. of India, Home Department.

for C.

Report on State Hospitals

NOTE FOR ~~THE~~ G. S.

H.E. ... Govt. has ... this draft. Need it go ... to H.E. with ref: to your note in the margin of para ... to and H.E.'s reply thereto. The review is long overdue.

DSB.
28/8/95

Issue as advised. House bombay H.H. agam the point is clear on the Govt. 6/11/95

8/11/95

Draft

Govt. of India, Home Dept. No. 712-13 dated 4/10

W
28 Aug

28/8/95

JG
2/11/8

Public Department.

No. 2261

Read the following paper.-

Annual Report and Statistics for 1894 of the State Hospitals in the Presidency Town of Madras.

ORDER of 28th August '95, No. 712.

A

The Surgeon-General, in submitting his report on State Hospitals for 1894, explains that in order to show more clearly the work done in, and the relative cost of, each hospital he has adopted a somewhat different system from that of preceding years.

2. A comparative statement of the work done and the charges incurred during the past three years in the six State Hospitals is appended.-

Year	No. of patients treated In	Out	Total	Average daily attendance In	Out	Percentage of mortality	Major surgical operations	Recoveries from paying patients	Cost of diets	Total gross Expenditure
								Rs.	Rs.	Rs.
1892	13,185	76,087	89,272	851·71	576·40	6·19	3,498	15,987	102,005	3,49,7
1893	13,194	81,518	94,712	810·26	583·47	5·18	3,417	19,661	109,951	3,64,1
1894	13,863	82,515	96,378	821·38	560·68	5·02	3,355	21,481	106,071	3,53,1

3. Compared with the preceding year there was an increase of 1666 patients and a decrease in the percentage of mortality. The expenditure was less by Rs. 11,916 and the cost of diets fell from Rs. 109,951 to Rs. 106,071, or by 3½ per cent. This is accounted for by the fall in the price of provisions. The price of rice, which is the principal article of diet, however fell from 18·8 seers per rupee in 1893-93 to 21·8 seers in 1893-94, or by more than 13 per cent.

4. It appears that the expenditure on bazaar medicines was only Rs. 488 against Rs. 5,117 in 1893. This is attributed mainly to the more correct entry of charges under their proper heads. In its letter No. 592, dated 27th September 1894 (G.O. No. 341, dated 4th May 1895) the Government of India remarked on the large expenditure in special State Hospitals in Madras in 1893 on bazaar drugs as well as on English medicines, and in his letter recorded in G.O. No. 527, dated 25th June 1895, the Surgeon-Genl. explained that the cost of medicines in this Presidency was much higher than in the North West Provinces on account of the extensive use of indigenous drugs

Cases	in the Genl. Hospl.....	6,647
,,	W. & C's. ,,.....	586
,,	Lying-in ,,.....	760
	Total No.	7,993
Cases	in 1893.....	5,638
,,	1892.....	8,403

is more largely directed in their professional training to the British Pharmacopœia, and when there is also a prejudice against the use of these drugs on account of the difficulty of getting them pure & reliable.

of medical subordinates not being familiar with them. In para. 4 of the G.O. last quoted the Govt. remarked that more attention should be paid in the education afforded at the Medical College to the employment of indigenous drugs, which are naturally much cheaper than European medicines, and directed that their use where practicable and expedient should be encouraged. It is clear from the figures now furnished that the matter is one which calls for the particular attention of the Surgeon-General.

5. In addition to the patients treated in the Six State Hospitals it appears from para. 5 of the report that the large number of 108,362 received attention in the other private, municipal, or aided institutions which exist at the Presidency Town. These large numbers evidence the growing popularity of European hospitals and dispensaries. Although 1894 was a comparatively healthy year, there was a marked increase in the number of cases of malarial fever. The statement of mortality in para. 9 contains, as remarked by the Surgeon-General, inadequate information and no percentages. It is hoped that the orders already

already issued by the Surgeon-General will result in more detailed records being maintained in future. The existence of septicaemia in the various hospitals should in future reports be fully discussed, and it should be noticed what proportion of the cases is traceable to conditions arising before the admission of the patient and how far they originated within the hospital. The return of 418 cases in the Women and Children's Hospital under the general undefined head of 'debility' is unsatisfactory, but as the officer responsible has retired from the service the Govt. will merely request the Surgeon-General to take steps to prevent such remissness in future.

6. From the statement in para. 4 it appears that altogether 1035 beds were available but the average daily sick numbered only 871. This is particularly noticeable in the case of the Lying-in Hospital, where the 133 beds had on an average only 68 occupants. The Surgeon-General should in future report the largest number of in-patients on any one day at each hospital.

7. Details regarding operations such as were embodied in para. 6 of the report for 1898 have not been afforded. The omission should be supplied and the particulars given in future. Statement III A contains particulars of major operations, but they have not been summarised, nor is anything said in regard to ~~minor~~ major operations.

8. The average cost of diets in the different institutions during the past three years is shown in the margin. The decrease at the Leper Hospital is stated to be due to the more strict maintenance of the diet registers This statement is, however, discounted by the second para. of the report at page 94 from which it appears that had last year's method of calculation been adopted the average cost would have been 5 as. 7 ps. The Surgeon-General states that the variations in the cases of other hospitals are not sufficiently marked to call for special notice. This apparently refers to the total cost of the diets, which for the past two years was as shown in the margin. The averages, however, exhibit considerable ~~ar~~ ses at the Ophthalmic and Lying-in Hospitals and a rise of 3 pies per diet at the Women and Children's

	1893	1898	1894
General Hospital	5- ~~11¼~~	6- 5⅔	6- 8
W. & C's. ,,	5-11	6- 5	6- 8
Lying-in ,, Euro.	8- 4	8- 9	9- 7
Lying-in ,, Nat.	8- 8	8- 9	8-10
Ophthalmic ,,	6- 0½	6- 4	5- 4
Leper ,,	4- 8	5- 8	8-11
Vol. Venereal,,	8-11¼	8-11½	8-11

	1898 Rs.	1894 Rs.
General Hospital.....	37,507	39,480
Women & Children's...	19,461	19,869
Lying-in ...	16,596	16,473
Ophthalmic	5,869	5,264
Leper ...	38,996	18,751
Vol. Venereal ...	7,038	6,965.

Children's Hospital, which have not been satisfactorily explained in view of the fact that the prices of food commodities were lower in 1894 than in 1893. If the figures given are correct the cost of diets at the Ophthalmic Hospital rose more than 60 per cent.

9. The averages given in column 6 of the Statement at page 31 do not correspond in all cases with the the figures given in the separate reports attached. e.g. Col. 6 at page 33 gives the average cost for each diet in the General Hospital as 6 as. 1¼ pies as against the Surgeon-General's statement; and at page 50 the averages for the Lying-in hospital are shown to be:-

	Rs.-as.-ps.
European.....	0-9-7
Native.....	0-8-10
	0-18-5
	0-6-8½

as against the Surgeon-General's 6 as 7 pies. There is also reason to suppose that the systems adopted in the various institutions for the calculation of the averages are not all on the same lines. It is therefore quite impossible to arrive at figures on which correct comparisons can be based. The Government directs that in future the cost of European and Native diets be kept quite distinct and separate averages per diet per diem under each be worked out. This is the method employed in the report on the Calcutta Medical Institutions; vide Col. 6 of the Statement at page 36 of the report for 1892. The Surgeon General will state what method is at present in force in each of the State hospitals for the calculation of the average cost of each diet.

10. In regard to the financial side of the report, it is satisfactory to note that the amount paid by Govt. fell from Rs. 3,44,679 to Rs. 330,744, although the number of sick treated was larger. The recoveries from paying patients, however, rose from Rs. 19,661 to Rs. 21,481. In this connection the Govt. desires to be furnished with particulars of the use made of the quarters provided for native gentleman and the amount of fees recovered on that account. The large increase from Rs. 48,583 to Rs. 59,448 on salaries of Medical Officers is satisfactorily explained; as also is the advance from Rs. 38,638 to Rs. 38646 in the cost of "inferior dispensary establishment" at the General Hospital. The Surgeon-General's attention will be invited to para.

para. 5(g) (c) and of Brigade Surgeon Lieut. Col. Price's report (page 36) and he will be requested to state under what authority ~~[illegible]~~ temporary hands are sanctioned ~~[illegible]~~ month by month. The system, if worked carefully, may be a source of economy but is opposed to account principles as to the appointment of establishments. The Surgeon-Genl. has already been directed to include all establishment which is practically permanent in the proposition statement for the revision of the establishment of the General Hospital.

13. The Govt. has recently by G.O. dated 4th May 1895, No. 811 directed the Surgeon-Genl to make a full and careful inquiry into the cost of medicines as well as into the whole question of the expenditure incurred in the City State Hospitals; ~~and until the results of the inquiry are before it, the Govt. will receive further remarks on the financial position of these institutions.~~ this report is awaited.

12. The Govt. ~~is entirely~~ regrets to observe that the present report shows that in more than one way there has been mismanagement, or careless supervision at the Women and Children's hospital. This is not likely to continue, [illegible] the

e Surgeon-General's attention will b directed to the matter.

18. The Govt. has perused with interest the professional reports of the Medical Officers concerned, and particularly notices with satisfaction the success ~~which has attended~~ of Brigade Surgeon Lieut. Col. Price's experiment in grass farming, which has resulted not only in an additional source of income to the General Hospital but in, what is far more important, an improvement in ~~the~~ its sanitary condition. His remarks in para. 5 (h) of ~~his~~ the report (pages 36 & 37) will be communicated to the Local and Municipal Department.

14. The question of revisin the charges for the "officers quarters" has already been referred to the Surge General in G.O. dated 31st May 18 No. 439. The Senior Medical Officer observations (page 38) on the subject have no doubt attracted the Surgeon-General's notice. The statement that th members of the steward's department at t General Hospital have to attend from 6-30 A.M. to 8 P.M. daily throughout t year and to take night duty once in si nights should be enquired into and a report submitted. The fact that the t stewards required assistance in their duties

para[illegible] of
[illegible] to give them time to check the
store-keeper's expenditure and returns
points apparently to a defect in
system. The Surgeon-General will report
fully on the existing arrangements.
The names of patients who die in the
Voluntary Venereal Hospitals should be
omitted from future professional
reports; initials or numbers are sufficient.
15. With reference to the
remarks under "midwives" on page
7, the attention of the Surgeon-General
will be invited to the paragraph re-
garding nursing at the lying-in hospital
on page 50. Surgeon Lieut. Col. Sturmer
appears to take
rightly dissatisfied with the
arrangements under which this important
duty
[illegible] is carried out entirely by
probationers. The Govt. is of opinion
that a small permanent staff of nurses
should be maintained. The Surgeon-
General will report on the point. At
page 39 it is stated that there were
36,570 "self diets" in the native
wards, giving an average of 7.88
"self diets" per diem. Either the
latter figure is wrong or the method
adopted in its calculation should have
been explained.
16. The Governor in
Council has read with gratification the

sent to Press.

d for signature.

had in

G.
189

Surgeon-General. 6
Examiner of Medical Accounts 6
Sanitary Commissioner 6
Financial Department 1
Local and Municipal Dept. 6
Accountant-General. 6

Number of Copies Required. Letter only. Order complete with Letter.

[illegible] to [illegible] by the [illegible]
General to the professional labours of
Brigade Surgeon Lieut. Cols. Price and
Brown and the other medical officers
mentioned in paras. 11 and 18 of the
report.
17. It is observed that the
report is dated the 18th June, but it w
not received, in print, till the 16th
July.

No.

30 Copies
Despd 11/9/95

5 Copies [illegible]
and [illegible]

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AGAIN G.O., No.
189

DATED

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General will report on
page 39 it is stated tha
26,570 "self diets" in t
wards, giving an average of 7
"self diets" per diem. Either
latter figure is wrong or the m
adopted in its calculation should
been explained.
16. [illegal] the Governor in
Council has read with gratification the

of the General Hospital:

10-12-04

25-4-07

25-9-07

28-12-07

10-9-10

11-11-10

21-10-12

27-3-13

5-11-13

27-1-14

28-1-15

10-3-15

26-8-15

11-7-16

