

Volume of observations upon the returns of sick, June 1854-Dec 1855; tables of meteorological readings at Balaklava, April 1855-June 1856; and Hall's observations on the difficulties experienced by the Medical Department during the Crimean War

Publication/Creation

1854-1856

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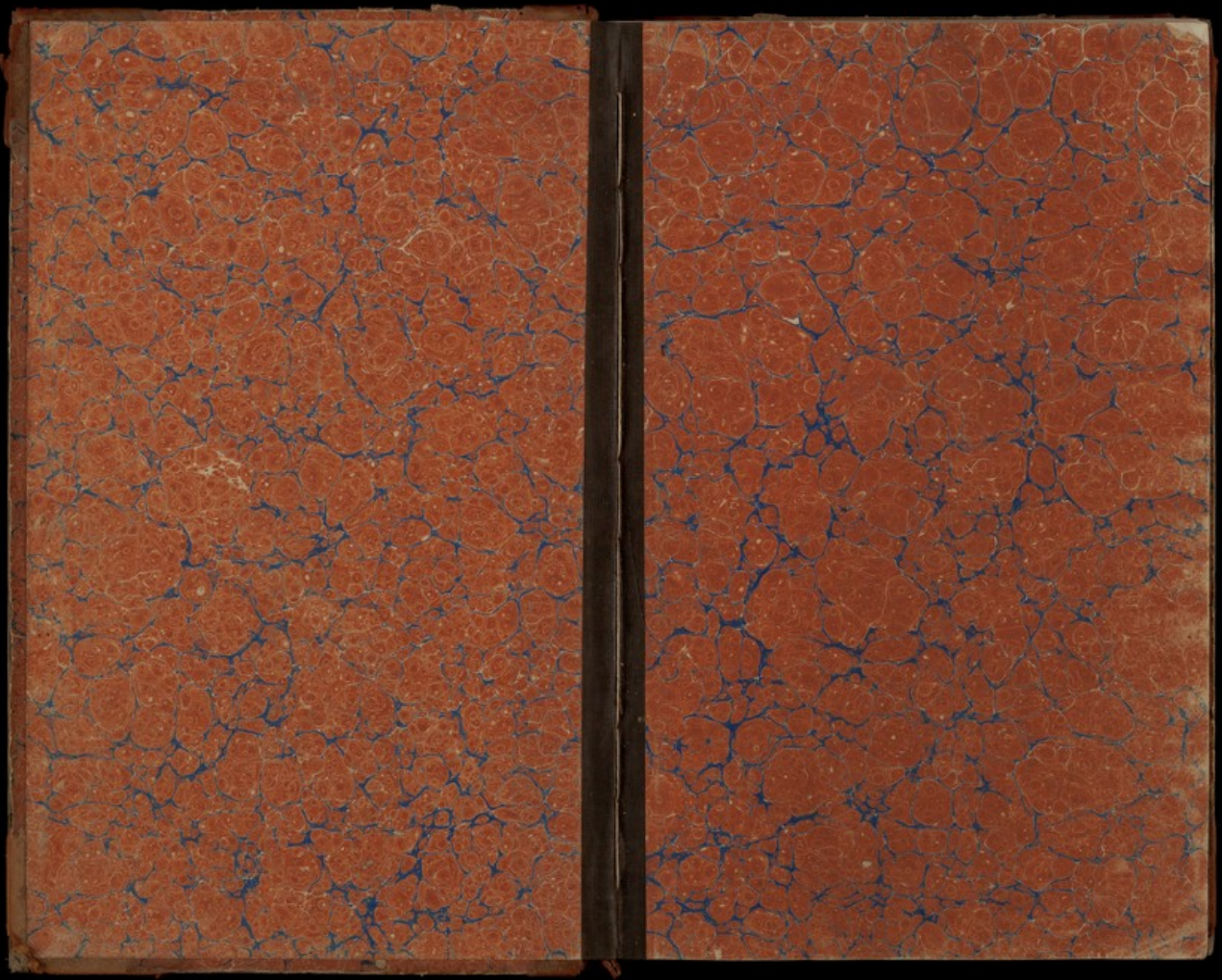


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Observations *on the* Quarterly
RETURN

Sick of the Army serving in TURKEY to the
30 June 1854.

The Force serving in Turkey during the period above mentioned consisted of Regiments that had been previously stationed in the Mediterranean, of Regiments that had been detained a short period at Malta; and of Regiments that had come direct from the United Kingdom to Constantinople. The Force before the end of the Quarter amounted to 25,457 men, and it occupied in succession (Gallipoli, Scutari) and the Valley of the Terna near Larna.

The following is an abstract of the admissions and deaths in the different Divisions of the Army by which it will be seen that a very great amount of various diseases prevailed; and that the mortality in the force during the period embraced by the accompanying Return was very trifling indeed.

Febile complaints appear to have been most prevalent in the 3rd Division, which occupied Gallipoli, from the early part of April to the end of June, and the Medical Officers ascribe many of them to exposure and irregularities on the part of the men themselves. Locality however, I think, must have had its influence in the generation of fever at Gallipoli, for as the season advanced the disease began to assume a typhoid type, in place of the slight ephemeral form which had previously prevailed, and seven deaths occurred out of the number taken all there. At Sulani the 4th Regt which occupied a portion of the large Infantry Bunkers that was old and were swarmed than the remainder of the Division began to have fever cases of a various type admitted into Hospital before the Regiment was removed to Tarna, but on its removal the disease disappeared.

In the 93rd and Rifles some cases of small pox occurred, and one case proved fatal. In the 95th the disease was contracted on board the Midway Steamer from a Sailor who was attacked with it in the passage out from England. Mr Gordon the Surgeon of the Regiment says that all the men who took small pox, bore marks of Vaccination, but that the disease was not in his opinion, modified in the least by their having undergone that operation. This opinion is at variance with the general experience of the Profession, and one can only infer the marks the men bore on their Arms were not those of genuine Cow pox. The Disease in the Rifles was also contracted on board ship.

Affections of the Lungs, next to Fevers have proved most fatal. These occurred chiefly in the early part of the Quarter when the weather was cold, wet, and changeable. Diseases which many men with disease considerably advanced were embarked for service in this Country, partly, I understand with an idea that change of Climate might prove beneficial.

(to them) but, mainly, I believe, to make a respectable show in paper of the force embarked, forgetting altogether that our Army in the field is encumbered, not strengthened, by such proceedings.

In the month of June however the Breach began to prevail very generally amongst the men, and in the 19th Regiment encamped at Madyne two Cases assumed the character of Cholera, and one of them proved fatal after a few hours illness on the 17th of that month. Another Case of mild Cholera occurred in a Company of Sappers that were employed in erecting a Wharf at the upper end of the Terna Lake near Madyne, and recovered, and a fourth, which scarcely deserved the name, was admitted into the General Hospital at Tarna. These were all the decided manifestations of that formidable disease which had made their appearance before the end of the Quarter, but from the heat of the weather, the locality, and the general tendency to Diarrhea amongst all ranks there was sufficient to make every one look forward with anxiety to the future.

Venereal Complaints, all brought out from England, and there is reason to believe intentionally contracted, have been the most numerous and troublesome class of diseases we have had to contend with, but there is one satisfaction as the men return they will have no opportunity of contracting the disease in this Country. But I fear, from what I have seen of modern practice, the Cases of secondary disease will be numerous and annoying.

After a review of this Quarter's Medical proceedings I think we may confidently pronounce them to be highly satisfactory but I cannot say that I anticipate a little favorable result for the Quarter we are now entering on.

The Troops here are well clad, well put up in tents, indifferently well fed, and not overworked, so that there is nothing to prevent their enjoying good health. But I understand, the Valley of the Terna is notoriously

unwholesome

Results of Meteorological observations taken at the Convalescent Station Dalakawa
232 feet above the sea - during the week ending 14 April 1855.

Month & date	Reading	Thermometers						Mean Temperature of Day	Daily range of Temperature	Direction of Wind	Rain in Inches	Aspect of Sky	Remarks
	of Barometer	In Shade	Wet bulb Shade	Wet bulb Sun	Range	High	Low						
April 8 th	29.538	52.8	56.6	51.3	—	60	58	49	22	S	0.000	Foggy	
" 9 th	29.414	59.4	41.4	38.6	—	59	52	53	2	S.E.	1.000	Rainy	
" 10 th	29.406	51.2	53.0	46.0	—	59	43	48.5	11	N.	0.937	Rainy	
" 11 th	29.286	51.6	56.6	51.0	65	64	43	53.5	21	S.W.	0.009	Rainy	
" 12 th	29.102	61.4	63.6	53.2	63	68	46	57	22	S.	0.007	Clear	
" 13 th	29.228	49.8	45.2	39.4	61	68	46	57	22	S.	0.000	Clear	
" 14 th	29.334	52.2	53.8	48.2	—	59	45	49.5	9	S.	0.007	Clear	

The reading of the Barometer gradually decreased the end of the week, to 29.34. The highest reading was had been 29.52 for the week, and the range 14. The 20' being the difference between the highest reading and the range of last week, and the mean daily range 52.9. Rain fell on four days in the week, altogether

during the week to 29.10 on the 12th and increased to 29.54 on the 8th. The lowest 29.10 on the 12th. The mean range of temperatures during the week was only on the 12th and lowest range on the 8th and only has been only 15'. The mean temperature was 49.6 inches attended with southerly stormy wind.

(Signed) J. H. Stephens M.D.
Staff Surgeon 2nd Class

Result of Meteorological Observations taken
the sea, during the week.

Date	Mean of Reading of Barometer	Thermometers			
		Mean of Mercury	In shade day bulb mean	In shade wet bulb mean	In sun Range
April 15 th	29.487	55	56	50	16
" 16 th	29.555	57	60	53	73
" 17 th	29.590	59	62	56	65
" 18 th	29.617	58	63	55	82
" 19 th	29.660	53	59	49	—
" 20 th	29.490	52	52	42	56
" 21 st	29.620	62	64	57	80

The reading of the Barometer increased gradually
decreased to the 19th and increased a little more
was 29.68 inches on the 21st the lowest was 29.42
range for the week, was 0.26 being 0.18 less than

The mean temperature for the week, was
for the week was 56 being the difference between
21st The mean daily range has been 22.9. Rain

The weather has been very fine the wind was
particularly at night. The remainder of the week

at the Castle Hospital Balaklava, 232 feet above
ending 21st April 1855.

Date	High	Low	Mean of day	Daily Range of Temperature	Direction of Wind	Rain in Inches	Aspect of Sky	Remarks
April 15 th	57	43	50	14	Calm	0.007	Clear	
" 16 th	58	43	50.5	15	N	0.000	Clear	
" 17 th	64	38	51	26	N	0.000	Clear	
" 18 th	70	40	55	30	N	0.000	Clear	
" 19 th	62	41	51.5	21	N strong	0.000	Clear	
" 20 th	60	36	48	24	N strong	0.000	Clear	
" 21 st	70	34	52	36	N	0.000	Clear	

from the commencement of the week, to the 17th
rapidly to the end of the week. The highest reading
on the 18th the mean for the week, was 29.53 the
last week.

62.2 being 9.3 greater than last week. The range
the highest reading on the 18th and lowest on the
fell to the depth of 0.007.

blowing very strong from the north on the 16. 19. & 20
the wind has been very light.

(Signed) J. H. Lephson M.D.
Staff Surgeon R.A.M.S.

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Results of Meteorological observations
232 feet above the level of the sea - during

Date	Mean Reading of Barometer	Thermometers				
		Mean mean	In shade day bulb mean	In shade night bulb mean	In room days	Self-registering High
April 22 ^d	29.530	61.2	61.0	55.0	81	65
" 23 ^d	29.514	59.8	58.0	52.2	—	62
" 24 ^d	29.516	62.4	62.4	55.8	74	66
" 25 ^d	29.535	59.5	58.2	56.7	73	66
" 26 ^d	29.520	60.5	62.5	56.0	74	67
" 27 ^d	29.506	64.8	64	55.7	75	68
" 28 ^d	29.532	57.0	63.3	56.6	74	69

The reading of the Barometer decreased gradually a little on the 27 and decreased again on the 28th the on the 28th the mean of the week was 29.529 - The range mean temperature for the week was 62.3, being only 0.1 more than the preceding week - The range for the week was 31, being the difference between the highest mean daily range was 23.4 - only rain to the depth has been fine and pleasant - wind only on one day evening on the 26th & 28th

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taken at the Castle Hospital Balaklava,
the week ending 28th April 1855-

Self-registering low	Mean Temperature of day	Daily Range of Temperature	Direction of Wind	Rain in Inches	Aspect of Sky	Remarks
38	57.5	27	Calm	0.000	Clear	
39	58.5	23	"	0.000	overcast	
42	54	24	Calm	0.000	clear	
44	53	22	Calm	0.000	clear	
45	51	22	Calm	0.007	overcast	
48	56.5	23	Calm	0.000	clear	
46	57.5	23	Calm	0.000	overcast	

from the commencement of the week to the 26th - In some highest reading was 29.56 on the 22^d - The lowest 29.18 was 0.38 - a little greater than last week - the 0.1 more than the preceding week - The range for the reading on the 28th and lowest reading on the 22^d the of 0.007 inches fell during the week - The weather during the week - The sky was overcast and threat.

(Signed) J. H. Stephens
Staff Surgeon Fleet

Results of Meteorological observations
above level of the sea -

Date	Mean Reading of Barometer	Thermometers			
		Meaning Mean	Dry bulb in shade	Wet bulb in shade mean	In sun rays
April 29 th	29.208	54.6	56.7	50.7	—
30 th	29.374	55	56	51.2	—
May 1 st	29.515	55.2	41	53	80
2 nd	29.508	56.2	60	53	78
3 rd	29.516	65.2	65.6	59	80
4 th	29.540	62.5	61	55	76
5 th	29.634	59.2	60.5	59.6	74

The reading of the Barometer increased gradually and decreased a little on the 5th. The highest reading for the week was 80.9 being 1.4 less than last week. The mean for the week was 29.509 inches. The range between the highest reading on the 3rd and lowest on day only. The prevailing direction of wind has been mostly clear and delightful feeling a little hot

Date	Temp	Wind	Humidity	Barometer	Wet bulb	Dry bulb	Remarks
May 1 st 1855	1622	371	177	1	99	1066	692
2	1593	409	177	3	90	1020	666
3	1525	360	165	2	95	1031	666
4	1527	350	171	3	90	1065	697
5	1509	345	181	3	89	1071	705
Total	7776	1835	871	12	463	6253	

taken at the Cooks Hospital Balaklava, 232 ft
during week ending 5 May 1855 -

High	Low	Mean Temp of day	Range of Temp	Direction of Wind	Rain in inches	Depth of Snow	Remarks
58	47	52.5	11	S.	0.000		overcast
56	45	50.5	11	S.W.	0.372		cloudy
68	46	57	22	N.	0.000		overcast
68	41	54.5	27	N.W.	0.000		variable
72	40	56	32	S.	0.000		clear
66	40	53	26	S.	0.000		clear
69	44	56.5	25	S.	0.000		clear

from the commencement of the week to the 4th was 29.68 on the 5th. The lowest on the 29th 29.17 inches. The range for the week was 0.51 inches. The mean temperature for the week was 52 being the difference 34th. Rain fell to the depth of 0.372 inches and on one day only. The prevailing direction of wind has been mostly clear and delightful feeling a little hot

(Signed) J. L. Kephart M.D.
Staff Surgeon 23rd Bal.

Results of Meteorological Observations taken above the level of the sea - during the

Date	Mean reading of Barometer	Thermometers				
		Mean Mercury	Mean of sun & air	Mean of sun & air in shade	Wet bulb	Wet bulb in shade
May 6 th	29.530	71.5	74.	63.2	80.	77.
" 7 th	29.400	68.2	71.3	63.	76.	76.
" 8 th	29.587	66.7	72.	64.	80.	74.
" 9 th	29.526	72.5	74.5	64.2	79.	79.
" 10 th	29.184	58.8	59.	58.5	—	62.
" 11 th	29.258	59.	60.4	58.	68.	63.
" 12 th	29.354	63.2	60.	56.	—	61.

The reading of the Barometer decreases from the 6th decreased again to the 10th and increased to the end the lowest 29.12 inches on the 10th. The mean for the week was 57. The range for the week was 59, being 9th and lowest on the 10th. Rain fell on the three last days of the week, but has been southerly blowing very has been very fine the first four days of the week, to 12 & daily -

at the Castle Hospital Dalaklara 232 feet week ending 12th May 1885 -

Date	Mean daily temperature	Daily temperature	Direction of wind	Rain in inches	Aspect of day	Remarks		
						Low	High	
50	53.5	27	Caln	0.000	Clear	201.322	2.172.02.074	
51	53.5	25	Caln	0.000	Clear	201.328	2.172.04.015	
47	50.5	27	S.	0.000	Clear	201.337	2.172.02.100	
45	52.	34	S.E.	0.000	Clear	201.322	16.00.03.115	
44	53.	18	S.E.	0.604	Rainy	201.361	18.00.07.115	
39	51.	25	S.	0.674	Rainy	201.377	19.00.08.116	
37	49.	24.	S.	0.357	Rainy	201.610	21.00.03.122	
						Total	201.357	2.172.04.072

commencement of the week to the 7th increased on the of the week - the highest reading was 29.59 on the 8th week was 29.38 inches - the mean temperature for the difference between the highest reading on the days of the week altogether 2.138 inches. The prevailing strong on the nights of the 10.11 & 12. The weather but the last three have been very wet raining up

(Signed) J. H. Stephen M.D.
Staff Surgeon, 2nd Class.

Results of Meteorological Observations taken above the level of the sea

Date	Mean of readings of Barometer in inches	Thermometers				Mean temperature of day
		Mean of Mercury	Low	Self Reg. Day High	Self Reg. Night Low	
May 13 th	29.528	62.2	52	70	51	60.5
" 14	29.518	64.2	54	71	52	63
" 15	29.480	71.2	55	75	56	67
" 16	29.460	75.5	56	80	61	70.5
" 17	29.622	68.7	50	72	53	62.5
" 18	29.632	72.2	41	85	54	69.5
" 19	29.500	73.5	104	87	53	71

The reading of the Barometer increased from on the 15th increased to the 18th and decreased on the lowest was 29.39 on the 15th. The mean for the week was 66. The range of temperature was 38 being the difference the 13th. Rain fell on the first day of the week but a very moderate breeze. The weather has been very

Date	Wind	Force	Dir.	Barom.	Therm.	Hum.
May 13 th 1855		396	53	169	100	1253
" 14		409	62	172	105	1175
" 15		430	63	169	106	1187
" 16		483	74	167	99	1190
" 17		474	81	177	88	1188
" 18		459	86	153	91	1192
" 19		472	96	151	85	1169
Total		3201	495	1160	674	8249

at the Castle Hospital Balgkawa 270 feet during the week ending 19th May 1855.

Date	Weight of Air cubic feet per cubic foot of gas	Temperature of Air in degrees Fahrenheit	Degree of Humidity	Direction of Wind	Direction of Sky	Rain in inches
19	5.60	70	76	S	clear	0.761
22	5.85	70	70	S	clear	0.000
22	5.69	61	61	S	clear	0.000
19	5.69	61	61	S.S.E.	clear	0.000
19	6.22	71	71	S	clear	0.000
31	6.37	64	64	calm	clear	0.000
32	6.22	55	55	N.E.	clear	0.000

The commencement of the week to the 14th decreased 19th. The highest reading was 29.64 on the 18th the lowest 29.32. The mean temperature for the week was between the highest reading on the 19th and lowest on the prevailing wind has been southerly at all times from the last six days, but rather warm the last two.

(Signed) J. R. Siphson M.D.
Staff Surgeon R.N.

Results of five daily Meteorological observations taken at the Civil Hospital, Balaklava during the week ending 25 May 1855.

Date	Mean Readings of Barometer in in.	Thermometers				Mean of day
		Mean of 24 hrs. Mercury	Self Reg. High	Self Reg. Low	Self Reg. Max	
May 20 th	29.450	71	79.8	74	57	68
21 st	29.516	69.2	74	75	55	65.5
22 nd	29.682	69.5	83	75	55	68.5
23 rd	29.696	69	76	78	53	63
24 th	29.650	70.2	80	82	56	69
25 th	29.597	73.5	81	82	55	68.5
26 th	29.532	72.8	84	77	59	65

The reading of the Barometer increased from the to the end of the week. The highest reading was 29.74 for the week was 29.58 - the mean temperature for being the difference between the highest reading on the 25th - the prevailing direction of the wind has been 25th when it blew strong from the North West. Distant westward the weather has been remarkably fine the

Date	Wind	Force	Dir.	Rel.	Humid.	Bar.
May 20 th	1375	486	90	140	82	1187
21 st	1378	494	92	143	79	1204
22 nd	1315	474	82	136	80	1182
23 rd	1299	479	88	145	83	1200
24 th	1239	463	91	140	83	1205
25 th	1172	463	94	139	86	1193
26 th	1159	482	91	138	94	1201
Total	8937	2096	501	987	587	8872

Results of five daily Meteorological observations taken at the Civil Hospital, Balaklava during the week ending 25 May 1855.

Daily Range of Temperature	Weight of Vapor	Relative Humidity	Direction of Wind	State of Sky	Rain in Inches	
22 nd	5.96	72.23	58	N	clear	0.000
21 st	6.87	1.89	76	N	clear	0.000
21 st	6.03	2.47	71	N	cumuli	0.000
20 th	6.30	3.01	67	N	cumuli	0.000
26 th	6.49	3.11	67	N	clear	0.000
27 th	6.26	3.93	67	N	cumuli	0.000
18 th	7.62	2.57	74	Calm	cumuli	0.000

commencement of the week, to the 23rd, and decreases on the 22nd - the lowest was 29.45 on the 20th. The mean for the week was 66.7 the range for the week was 29.24 and 25 and lowest on the 23rd - no rain fell during the week - the prevailing breeze unless on the night of the 25th when it blew strong from the North West. Distant westward the weather has been remarkably fine the

(Signed) J. St. Saphron M.D. Staff Surgeon 2nd Regt.

Results of five daily Meteorological Observations taken at the Castle Hospital Balaklava during the week ending 2 June 1854

Date	Mean of Readings of Barometer inches	Thermometers					Mean of Day
		Mean of Mercury	Shade	Self Reg'd High	Self Reg'd Low	Temperature of Day	
May 27	29.540	68°	78°	76°	57°	66.5	
28	.532	69.2	80.	72	57	64.5	
29	.720	72.2	84	79	53.	66.	
30	.785	71.6	80	78	63.	70.5	
31	.912	74.6	86	83	63.	73.	
June 1	.880	80.2	96	85	60.	72.5	
2	.862	76.2	102	86	64.	75.	

The reading of the Barometer increased to the end, - the highest reading was 29.94 for the week, was 29.75. The mean temperature 53 being the difference between the highest reading the depth of 2.412 inches on the first day of the week, day in two showers with an interval of about 45 below zero, the weather has been fine but the able to the feel, which is well shown by the height of the air.

Date	Wind	Direction	Force	Barometer	Thermometer	Moisture
May 27 th	116.1	480	93	135	83	1220
28 th	116.5	486	95	136	88	1237
29 th	1181	573	101	124	90	1242
30 th	1187	505	97	135	74	1222
31 st	1186	537	105	140	78	1230
June 1 st	1184	555	123	142	80	1209
2 nd	1246	588	134	149	71	1198
Total	5278	3554	743	944	564	

Results of five daily Meteorological Observations taken at the Castle Hospital Balaklava during the week ending 2 June 1854

Daily Range of Temperature	Weight of Vapor	Degree of Humidity	Direction of Wind	Aspect of Sky	Rain in inches
19°	6.91	7.34	72	calm	Cumuli 2.412
15	5.95	2.05	74	"	Cumuli 0.000
26	6.95	2.36	76	S	Cumuli 0.000
15	7.08	1.96	78	S	clear 0.000
20	7.48	3.02	71	calm	clear 0.000
25	8.19	3.25	71	calm	clear 0.000
22	9.31	2.51	78	calm	clear 0.000

31st from the commencement of the week and on the 31st the lowest 29.53 on the 27th. The mean for the week was 69.6. The range for that week was on the 2nd and lowest on the 29th. - Rain fell to during the space of 3 hours in the middle of the week - the prevailing direction of the wind has been from the S.W. with a force of 10 or 12 miles per hour. The heaviness of the atmosphere has been most remarkable. Barometer and the great amount of vapor contained

(signes) J. W. Stephenson M.D. Staff Surgeon 2nd Class

Results of five daily Meteorological Observations
270 feet above the level of the sea.

Date	Mean of Readings of Barometer Inches	Thermometers			Mean Tem.
		Mean of In sun	In Shade	Wet Bulb	
June 3 rd	29.580	74.7	106°	86°	61°
4.	.802	75.11	96	84	58
5.	.667	73.5	108	87	56
6.	.570	76.5	106	90	60
7.	.485	80.	94	85	65
8.	.425	70.	78	80	62
9.	.637	69.2	82	80	44

The readings of the Barometer during the week decreased to the 8th and increased on the 9th. The highest reading was 29.90 on the 2nd. The lowest was 29.032. The mean temperature was 56° being the difference between the highest and lowest.

The weather has been lighter more overcast and

Date	Wind	W. by N.	W. by E.	W. by S.	W. by W.	W. by N.W.
June 3	1219	621	130	158	66	1204
4.	1198	611	160	145	71	1164
5.	1168	647	158	144	60	1169
6.	1159	736	178	140	70	1216
7.	1191	783	193	134	75	1210
8.	1164	788	204	138	72	1225
9.	1136	761	196	130	67	1218
	8335	4947	1219	989	481	9776

taken at the Castle Hospital, Balaclava during the week ending 9th June 1855.

Date	Daily Temperature Range	Weight of Vapor		Degree of Humidity	Direction of Wind	Direction of Sky	Rain Inches
		In Grains per cubic foot	In Grains per cubic foot				
3 rd	25°	2.58	2.94	75	Caln	Clear	0.000
4.	19	3.80	2.31	82	S.E.	Clear	0.000
5.	31	7.25	2.94	71	S.	Clear	0.000
6.	30	6.95	4.87	58	N.	Clear	0.000
7.	20	9.03	2.44	78	Caln	Cloudy	0.000
8.	18	5.63	3.13	64	N.	Cloudy	0.000
9.	36	6.87	1.89	78	N.E.	Clear	0.000

week decreased to the 8th and increased on the 9th. The lowest reading was 29.37 on the 8th. The mean for the week was 29.44. The range for the week readings on the 6 and lowest on the 9th. The wind particularly strong on the night of the 5 and 7th cooler than the preceding week.

(Signed) J. H. Stephens.
Staff Surgeon R.A.M.C.

Results of Meteorological observations taken at
height 232 feet.

Date	Mean Pressure of Barometer	Thermometer			Mean Temperature of day	Degree of Humidity	Direction of Wind	Force in Fathoms
		Self Reg. max high	Self Reg. min low	Wet Bulb Range				
1 st	29.016	50.	31.	52.	40.2	67.	N.W.	0.000
2 nd	29.064	54.	28.	68.	41.	51.	S	0.000
3 rd	29.929	62.	28.	63.	46.	53.	N	0.000
4 th	29.810	68.	34.	68.	51.	52.	Calm	0.000
5 th	29.600	68.	41.	77.	53.	71.	Calm	0.000
6 th	29.576	64.	42.	68.	53.	70.	Calm	0.000
7 th	29.588	60.	40.	58.	50.	63.	S.W.	0.000
8 th	29.538	60.	38.	—	49.	70.	S	0.000
9 th	29.414	54.	52.	—	53.	50.	S.E.	1.000
10 th	29.406	54.	43.	—	48.2	70.	N	0.937
11 th	29.286	64.	43.	68.	53.2	70.	S.W.	0.009
12 th	29.102	68.	40.	63.	57.	67.	S	0.007
13 th	29.228	68.	46.	61.	57.	61.	S.	0.000
14 th	29.534	54.	48.	—	49.2	66.	S.	0.007
15 th	29.487	57.	43.	60.	50.	70.	Calm	0.007
16 th	29.533	58.	43.	70.	50.2	66.	N.	0.000
17 th	29.590	64.	38.	65.	51.	71.	N.	0.000
18 th	29.577	70.	40.	82.	58.	63.	N.	0.000
19 th	29.400	62.	41.	—	51.2	58.	N.W.	0.000
20 th	29.490	60.	36.	56.	48.	50.	N.W.	0.000
21 st	29.620	70.	34.	82.	52.	67.	N.	0.000
22 nd	29.530	65.	38.	81.	51.2	71.	Calm	0.000
23 rd	29.514	62.	39.	—	52.2	70.	N.	0.000
24 th	29.576	66.	42.	74.	54.	67.	Calm	0.000
25 th	29.338	66.	44.	73.	58.	61.	Calm	0.000
26 th	29.290	67.	45.	74.	57.	71.	Calm	0.007
27 th	29.306	68.	48.	75.	56.2	63.	Calm	0.000
28 th	29.232	69.	46.	74.	57.2	71.	Calm	0.000
29 th	29.208	58.	47.	—	52.2	70.	S	0.000
30 th	29.574	60.	48.	—	50.2	68.	S.W.	0.372
Total	29.429	62.	—	—	57.	—	—	2.346

Castle Hospital, Balochkava during Month of April 1855

Number of cases	Number of cases on the whole during the month					Remarks
	Fever	Scald	Cholera	Dysentery	Other	
1882	587	—	296	979	127	Spontaneous
1897	460	—	283	110	131	"
1905	567	1	273	978	123	"
1903	559	—	242	945	138	"
1928	534	1	253	1048	142	"
1968	535	—	205	966	158	"
1983	512	—	213	968	160	"
1974	513	4	241	949	166	"
1962	470	1	235	915	177	"
2002	475	—	238	916	180	"
1967	473	—	227	902	192	"
1948	455	—	218	869	197	"
1902	432	—	203	886	211	"
1888	446	—	213	766	279	"
1881	439	—	208	886	237	"
1871	441	—	188	806	245	"
1801	410	—	148	853	252	"
1793	421	—	190	803	274	"
1769	407	—	188	830	290	"
1776	369	1	193	808	310	"
1757	405	2	195	820	318	"
1741	350	2	186	791	354	"
1742	370	2	174	778	383	"
1716	320	3	175	822	360	"
1688	372	1	159	799	346	"
1669	370	1	178	811	348	"
1630	365	1	181	790	358	"
1637	335	4	183	873	348	"
1653	377	—	175	812	334	"
1583	368	1	185	783	368	"

Results of five daily Meteorological observations taken at the Castle Hospital 270 feet above the level of the sea - during the week ending 16 June 1855.

Date	Mean of readings of Barometer	Thermometers			Mean of Daily temperature	Daily range of temperature
		Mean of 10 lines	High	Low		
10 th	29.667	75.5	86.	58.	69.	32.
11 th	732	70.2	74.	50.	54.	26.
12 th	726	72.6	92.	58.	59.	26.
13 th	.635	72.	96.	58.	58.	27.
14 th	.730	73.7	97.	58.	58.	30.
15 th	.733	72.8	98.	57.	72.	30.
16 th	.733	73.3	101.	58.	56.	32.

The reading of the Barometer increased from the 13th and increased to the end of the week - the 29.63. on the 10th - The mean for the week was 73.3 - The range for the week was 35 being the difference on the 10th - No rain fell during the week in sun -

Date	Barometer	Thermometer	Thermometer	Thermometer	Thermometer	Thermometer
June 10 th	1087	806	222	102	70	1521
11	1057	827	207	103	70	1549
12	998	858	221	96	72	1508
13	947	857	217	87	69	1514
14	987	903	223	76	60	1502
15	1019	981	229	79	59	1516
16	1054	977	219	82	58	1622

Observations taken at the Castle Hospital during the week ending 16 June 1855.

Date	Height of surface of sea	Direction of wind	Force of wind	Direction of sky	Rain
10 th	9.49	N	82.	Clouds	0.000
11 th	6.49	E.	67	Clear	0.000
12 th	7.57	E. by S.	68	Clear	0.000
13 th	8.30	N.W.	65	Clouds	0.000
14 th	5.99	E.	64	Clear	0.000
15 th	7.25	E.	71	Clear	0.000
16 th	7.71	N.E.	71	Clear	0.000

the beginning of the week to the 11th decreased in height - reading was 29.62 on the 11th - the lowest was 29.715 - The mean temperature for the week was 69.9 - between the highest reading on the 16th and lowest - The weather has been very fine, but rather warm.

(Signed) J. H. Diphson
Staff Surgeon R.N.

Results of five daily Meteorological observations taken at the Basile Hospital Matatclawa 270 feet above level of the sea - during the week ending 23 June 1855.

Date	Mean reading Barometer	Thermometers			Mean daily temperature range of day - temperature	Weight of vapour in cubic feet per cubic foot of air	Degree of humidity	Prevailing direction of wind	Amount of Rain in inches	Remarks				
		Mean	Winds	Self registering High Low										
17 th	29.677	80.5	108	58	57	72.5	31.	8.24	8.05	62	N.	clear	0.000	99 91 20 02 41 1519
18 th								made						
19 th	29.600	81.6	105	86	63	74.5	23.	8.05	3.77	68	Caln	clear	0.000	94 82 20 76 60 874
20 th	.545	81.5	110	87	64	70.5	23.	10.31	3.37	75	N.W.	clear	0.000	93 107 79 79 58 222
21 st	.553	78.3	108	86	64	70.	22.	7.21	3.93	64	N.	clear	0.000	86 69 25 77 59 2171
22 nd	.625	82.	106	88	63	70.5	25.	9.59	2.58	78	S	cumul.	0.000	106 60 25 79 59 2591
23 rd	.510	80.2	108	88	65	76.5	23.	9.37	4.37	68	S.	clear	1.975	117 65 25 80 64 2509

The reading of the Barometer decreased on the 23rd. The highest reading was on the 20th - The mean for the week was 29.555 - The range for the week was 31. being the difference bet^h the Rain fell to the depth of 1.975 inches or by thunder & lightning and followed by strong gizzard during week was from the North. The day -

during the week to the 20th increased to the 22nd 29.71 on the 17th the lowest reading was 29.45 - The mean temperature for the week was 74.9 between highest reading on the 22 and lowest on the night of the 23rd between 10 and 11 1/2 o'clock previous South-east Wind - The prevailing direction the weather has been fine, but very hot during

(Signed) H. Popham M.D.
23rd June 1855

26. Results of five daily meteorological observations taken at the Castle Hospital, Balaklava, 270 feet above level of the sea - during the week ending 30th June 1855.

Date	Mean of Barometer Reading	Thermometer			Mean Daily Temperature	Range of day	Direction of Wind
		Mean of 24 hours	High	Low			
24 th	29.480	74.7	107	59	50	74.5	5
25 th	.332	77.5	90	65	65	75.5	21
26 th	.497	78.2	86	78	65	71.5	13
27 th	.460	70.	79	72	62	67.	10
28 th	.410	70.8	78	74	61	67.5	13
29 th	.602	65.	89	73	69	66.	14
30 th	.642	67.5	109	73	53	64.	18

The reading of the Barometer decreased to the end of the week. The highest reading was 29.487 - The mean temperature for the week was 68.1 being the difference on the 30. Rain fell on two days altogether variable blowing strong from the North during more equably cool than it has been for

27. Observations taken at the Castle Hospital, Balaklava, 270 feet above level of the sea - during the week ending 30th June 1855.

Date	Weight of Vapor		Degree of Saturation	Direction of Wind	Sky	Rain in inches	Remarks
	Actual	Required for Saturation					
24 th	5.30	2.31	78	Variable	clear	0.000	was very cool on 27 th 28 th
25 th	7.53	4.64	61	S	cumuli	0.000	was very cool on 27 th 28 th
26 th	7.04	2.85	71	N.E.	cumuli	0.764	was very cool on 27 th 28 th
27 th	6.03	2.47	74	S	strati	1.053	was very cool on 27 th 28 th
28 th	6.78	2.29	74	N	strati	0.000	was very cool on 27 th 28 th
29 th	6.32	2.17	74	W	cumuli	0.000	was very cool on 27 th 28 th
30 th	5.28	2.97	64	N	clear	0.000	was very cool on 27 th 28 th

on the 25th increased on the 28th and decreased was 29.48 on the 29th. The lowest 29.29 on the 25th - The range of temperature for the week was 68.1 The range of temperature between the highest reading on the 24th lowest on the 30th of 1.847. The wind has been very variable. The weather during the week has been some times

(Signed) H. Stephens
Staff Surgeon R.M.S.

Results of five daily Meteorological
 Observations taken at the Quetta Hospital
 270 feet above level of the
 sea during the week ending 7th July 1855.

Date	Mean Baromet. Reading	Baromet. Reading			Mean Temp. of Day	Daily Range of Temperature	
		Mean	Max	Min			
July 1	29.702	69.5	96	77	55	66	22
2	.800	70.2	98	79	57	68	22
3	.662	71.	99	76	59	67.5	17
4	.610	72.	96	76	59	67.5	17
5	.600	73.3	110	80	59	69.5	21
6	.637	76.	90	81	62	73.	22
7	.697	75.2	88	87	57	72.	30

The reading of the Baromet. increases
 again increases to the end of the week.
 The highest reading was 29.82 on the 2nd and
 the lowest was 29.6. The range for the week
 on the 7th and lowest on the 1st. Rain fell
 0.555 inches. During the night of the 2nd and
 heavy from passing clouds for half an
 continues very warm particularly on the

Date	Mer.	Wind	Cloud	Humid.	Temp.	Baromet.
July 1 st 1855	11.7	15.27	327	77	64	29.702
2 nd	11.5	15.17	316	76	72	29.800
3 rd	11.43	15.77	298	57	80	29.662
4 th	11.35	15.29	286	78	77	29.610
5 th	11.20	15.47	248	87	72	29.600
6 th	11.77	18.93	278	81	77	29.637
7 th	11.67	18.73	271	69	73	29.697
7 th Total	79.72	129.63	2024	543	418	158.60

Observations taken at the Quetta Hospital
 sea during the week ending 7th July 1855.

Weight of Precipitation	Quantity of Rain	Direction of Wind	Force of Wind	State of Sky	Remarks
5.55	2.40	70	N	Clear	0.000
6.30	3.01	67	W	Cloud	0.532
6.75	2.29	74	N.W.	Cloud	0.000
5.99	3.32	64	N.W.	Cloud	0.000
5.77	4.12	58	N.W.	Clear	0.000
8.17	3.28	71	N	Clear	0.523
7.25	2.94	71	S	Hazy	0.000

from the 1st to the 2nd and decreases to the 5th and
 the mean height for the week was 29.672 inches.
 the lowest 29.54 on the 5th. The mean temperature
 was 52 being the difference between the highest
 on two days during the week to the extent of
 at 4 1/2 o'clock A.M. on the 6th when it fell very
 low preceded by thunder. The weather still
 muggy.

(Signed) H. Daphnis
 2nd Class Staff Surgeon

Results of daily Meteorological observations at the Castle Hospital Balaklava sea - during the week ending 14 July 1855.

Date	Mean of readings of Barometer	Thermometers						Mean Temperature of Day
		Sun	Mean of Air	Mean of Shade	Mean of Wet Bulb	High	Low	
July 8	29.638	53	110	50	69	72	64	75
" 9	.600	52.2	106	80	70	90	61	75.5
" 10	.554	54	104	80	69	59	61	75
" 11	.506	77.5	106	76	66	58	70	79
" 12	.480	85.7	90	81	72	88	72	80
" 13	.422	87.5	95	84	72	93	63	78
" 14	.522	72.8	98	69	59	76	61	68.5

The reading of the Barometer gradually to the 13th and increases on the 14th. The mean highest reading during the week was 29.65 in Temperatures during the week was 76.2 - difference between the highest reading on the during the week - Strong N.E. wind on the w. distance out at sea.

Observations at the Castle Hospital Balaklava sea - during the week ending 14 July 1855.

Daily Range of Temperature	Height of mercury		Degree of Humidity	Direction of Wind	Aspect of Sky	Rain in Inches	Remarks							
	at 9 a.m.	at 3 p.m.					at 9 a.m.	at 3 p.m.	at 9 a.m.	at 3 p.m.	at 9 a.m.	at 3 p.m.	at 9 a.m.	
28	6.33	44.48	58	N.W.	Hazy	0.000	155	106	215	240	75	75	95	
29	6.66	44.15	61	S	Clear	0.000	209	261	231	250	78	75	95	
28	6.38	44.48	58	W	Clear	0.000	157	160	225	257	76	74	200	
18	5.88	3.72	61	S.E.	Clear	0.000	220	166	165	261	80	74	200	
16	7.21	3.93	64	S	Clear	0.000	260	257	26	263	80	93	200	
30	6.83	5.24	56	E.	Bunk	0.000	265	572	110	181	96	85	100	
15	14.57	3.19	58	N.E.	Clear	0.000	264	260	250	254	11	85	100	
Total							0.000	155	106	215	240	75	75	95

decreased from the commencement of the week reading of the Barometer was 29.532 - the the 8th. The lowest 29.37 on the 13th. The mean The range of temperature was 32 being the 13th and lowest on the 9th 15th. No rain fell whole of the 14th and it appears to be raining

(Signed) W. H. Daphson M. D. Surgeon I. D. G. S.

2. Results of daily Meteorological obser-
Balaklava 270 feet above the level of

Date	Baromet. in	Thermometers						Mean Daily Temperature	Range of Day Temperature
		Amb. Air	Shade	Wet Bulb	Dry Bulb	Wet & Dry	Wet & Dry		
July 15	29.326	74	106	71	61	76	57	65	22
16	480	64.3	80	66	57	68	57	62	14
17	520	72.5	104	70	61	77	57	70.5	27
18	530	80	110	78	68	87	56	71.5	31
19	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-
21	-	-	114	-	-	89	57	78	32

The reading of the Barometer reading was 29.326 on the 15th the lowest has been 64.3. The range of temperature highest on the 21st and lowest on the 15th and from N.E. on the 16th attended with thunder & lightning and very heavy showers. 0.762 inches of rain fell on these three days. The weather was clear the remainder of the week.

Sickness prevented observations from

observations taken at the Castle Hospital the sea during the week ending 31 July 1855.

Weight of Water	Degrees Fahrenheit	Direction of Wind	Direction of Sky	Rain in Inches	Remarks							
					W	S	E	N	W	S		
5.03	5.22	60	N.W.	hazy	0.410	298	187	107	187	89	91	190
4.37	2.71	61	N.E.	clear	0.352	333	173	241	143	80	94	191
5.12	2.88	44	N.E.	clear	0.000	319	175	218	192	87	97	202
6.26	3.93	61	N.	clear	0.000	276	170	243	170	87	90	206
-	-	-	-	-	0.000	295	175	200	180	87	90	202
-	-	-	-	-	0.000	271	168	200	166	87	87	201
-	-	-	-	-	0.000	273	170	214	182	87	87	195
					3.22	2114	127	212	110	552	373	

decreased on the 16th & increased to the 18th. The highest 246 on the 16th. The mean temperature of the week has been 58 being the difference between the very strong wind blew from the N.W. on the 15th and lightning and very heavy showers. 0.762 fell rather cold the first two days, but very hot.

(Signed) R.H. Johnson M.D. Surgeon I.D. Gen.

being taken on the 19th & 20th.

Results of daily Meteorological observations taken at the Castle Hospital area - during the week ending the 28th July 1855.

Date	Mean of Readings of Barometer	Thermometers					Mean of day	
		Winds		Wet Bulb		Wet Bulb		
		Day	Night	at 4 p.m.	at 10 p.m.			
July 22	29.65	85.5	110	82	74	89	62	75.5
23	32.5	89	120	82	67	99	74	88.5
24	39.0	89	112	83	70	96	66	87
25	42.7	88.6	88	77	67	88	62	70
26	32.6	68.6	80	66	64	76	62	69
27	37.5	79.5	100	78	71	84	68	71
28	32.6	78.8	90	76	73	88	72	80

The reading of the Barometer de-
 creased from the beginning of the week to the
 lowest 29.32 on the 26th. The mean of readings
 for the week was 37.5. The difference between the highest reading
 and the lowest was 10.38. A
 thunder storm came on about noon
 Rain fell on three days of the week, altogether
 1.252 inches.

* Taken before rain came on.

Daily Range of Barometer	Winds of Day		Degree of Humidity	Direction of Wind	Height of Sky	Rain in Inches	Remarks
	Force	Direction					
27	7.81	3.66	68	W	clear	0.000	11.10.22.31.40.50.58.12
28	7.08	4.39	61	S	clear	0.000	12.21.30.40.50.58.12
30	6.07	6.46	48	N.W	Rain	0.368	11.10.22.31.40.50.58.12
26	6.06	3.83	61	N.W	hazy	0.674	11.10.22.31.40.50.58.12
14	6.35	0.73	89	N	hazy	0.000	11.10.22.31.40.50.58.12
16	7.25	2.94	71	N	Breeze	0.000	11.10.22.31.40.50.58.12
16	8.30	1.30	86	W	hazy	0.210	11.10.22.31.40.50.58.12

Total 1.252 inches

ceased from the beginning of the week to the
 lowest reading was 29.67 on the 22nd. The
 of the Barometer for the week was 29.489 -
 77.5. The range for the week was 37 being
 on the 23rd and lowest on the 22nd & 25th - A
 on the 24th attended with occasional showers
 1.252 inches.

(Signed) C. L. Johnson
 Surgeon 1st Regt. Gt.

36 Abstract of the Quarterly Return

Diseases	Remained	Admitted	Total	Discharged	Died	Remaining
Febria Intermit.	1	472	473	432	3	38
- a - Cont. Com.	95	2711	2806	2539	85	159
- a - Remittens	-	468	468	424	31	6
- a - Typhus	2	312	314	280	39	2
Pleuritis	"	24	24	24	"	"
Pneumonia	2	22	24	21	1	2
Hemiplegia	3	9	12	11	1	"
Phthisis pulm.	2	15	17	12	2	3
Calculus acut.	22	258	280	270	"	7
- a - Chron.	8	21	29	31	1	"
Bronchitis	1	7	8	6	1	1
Hepatitis acut.	"	6	6	5	1	"
- a - Chron.	2	6	8	7	1	"
Icterus	1	46	47	44	"	3
Zyosteria acut.	1	321	322	286	14	22
- a - Chron.	1	"	1	1	"	"
Dyspepsia	2	93	95	92	"	3
Hemorrhoids	1	27	28	28	"	"
Diarrhea	42	657	699	624	28	253
Cholera Spasmod.	6	175	181	177	"	4
Colica	1	118	119	114	"	2
Obstipatio	"	6	6	5	"	1
Gastritis	"	12	12	12	"	"
Cephalalgia	"	6	6	6	"	"
Apraxia	2	3	5	5	"	"
Paralysis	"	14	14	14	"	"
Leberum Trem.	1	12	13	10	3	"
Carried up	196	19351	19547	17963	1078	536

37 Sick, from the 1 July to 30 Sept. 1854

Diseases	Remained	Admitted	Total	Discharged	Died	Remaining
Carried up	196	19351	19547	17963	1078	536
Mania	1	4	5	4	1	"
Arthritides	"	1	1	1	"	"
Varicella	"	2	2	1	1	"
Scabies	3	"	3	3	"	"
Rheumat. Acut.	27	235	262	245	"	17
- a - Chron.	6	48	54	52	"	2
Morbus Coecae	"	1	1	1	"	"
Lumbago	"	10	10	10	"	"
Phlegmon et ulc.	63	365	428	419	2	13
Paronychia	10	21	31	30	"	1
Ulcus	18	137	155	146	1	8
Fistula in ano	"	3	3	3	"	"
Hernia lumbar.	3	71	74	72	"	2
Syphilis Prim.	83	70	153	144	"	9
- a - Cron.	26	59	85	79	"	6
Ulcus Penis h. b.	4	23	27	26	"	1
Bubo Simplic.	17	36	53	51	"	2
Gonorrhoea	25	29	54	53	"	1
Stricture h. b.	"	5	5	5	"	"
Quartan	1	14	15	14	1	"
Subleucatio	13	73	86	82	"	4
Vulnus Solop.	"	1725	1725	1263	211	251
- a - inuicium	12	56	68	67	1	"
Contusio	14	217	231	205	"	26
Fractura	1	13	14	13	"	1
Embustio	3	28	31	30	"	1
Morbus Oculi	33	164	197	195	"	2
- a - Cutis	2	30	32	32	"	"
Carried up.	563	16975	17538	15316	1246	926

38. Abstract of the Quarterly Returns

Diseases	Remaining	Admission	Total	Discharge	Death	Remaining
brought up	1563	11975	13538	12318	1296	926
Gnatharia tonsil.	8	33	41	41		
Odontalgia		14	14	14		
Scorbutus		1	1	1		
Otitis	1	6	7	7		
Punitus	4	94	98	98		
Urticaria		1	1	1		
Erysipilas	3	13	16	13	2	1
Psoa		5	5	5		
Phrenitis		1	1	1		1
Verues		7	7	7		
Observatio	1	17	18	18		
Contractura		1	1	1		
Phlebitis		1	1	1		
Anasarca		14	14	3		1
Emuresis		2	2	1		1
Nephrosia	1	2	3	3		
Debilitas		7	7	7		
Opneope		1	1	1		
Ampulatio		2	2	2		
Asthma		2	2	2		
Verruca	1	2	3	3		
Peritonitis		1	1	1		1
Scrophula	1		1			1
Hydrocele	1		1	1		
Furunculo	1	1	2	2		
Herma		2	2	2		
Varic	1	2	3	2		1
brought up	586	7190	7776	15345	1300	981

(Continued)

Diseases	Remaining	Admission	Total	Discharge	Death	Remaining
brought up	586	17190	17776	15345	1300	981
Chorea		1	1	1		
Diarrhoea of Brain		1	1	1		
Ancurivina		3	3	1	2	
Morbus cordis	1	11	12	8	3	1
Total	587	17206	17793	15355	1306	982

Remarks on the Quarterly Return of sick to 30th Sept 1854

At the commencement of July the British Army, which had been landed at Varna in Bulgaria in the course of the previous month, was encamped on the shores of the Lake of Doona - The 1st 2nd and 3rd Divisions a short distance from Varna itself, and the Light Division at a place called Bladyne about seven miles in advance - The Cavalry, and part of the Artillery were encamped on the sea beach on the south side of Varna Bay, between the sea and the foot of the lake - Early in July the Light Division moved to Doona about five miles in advance of Bladyne, and the 1st Division replaced it there - The second Division moved also and encamped on dry rising ground about two miles to the right of Bladyne, - and the 3rd Division remained some time longer in the vicinity of Varna on the bank of the Lake, - but when Cholera broke out all but one Regiment were removed to the Lybata heights on the south side of

Army in 1828, is to me incomprehensible -

At the close of June quarter it was noticed in my last Remarks, that cases of Dysentery had become common, and that disease of a grave character might be looked for, and unfortunately that prediction was verified in the course of July, for about the middle of that month a division of the French Army arrived at Varna from Gallipoli, where Cholera prevailed amongst the men of the 5th Regiment of the Line which had recently arrived at Gallipoli from Marseilles - Some fatal cases were reported to have occurred on the line of march from Gallipoli to Varna, and soon after the arrival of this Division Cholera broke out amongst the French troops, but whether it was from impatation of the disease, or owing to local circumstances, and peculiar atmospheric changes favouring its development I am not prepared to say, but I am inclined to infer the latter -

The history of the disease in the French Army is that a Zouave who had come direct from Africa was seized with the disease and died about the middle of June - It is a curious coincidence that a Man of the 19th Regiment of British Army, stationed with the Light Division at Abdone was attacked and died about the same time - no other cases are recorded as having occurred until some time in July when the disease re-appeared in the French Army, and extended to the British Army on the 20th, Dysentery however had become very prevalent and almost every one was attacked with it -

About the end of July Cholera made its appearance in the General Hospital of the French Army at Varna and cases continued to occur until the 14th when it first attracted our attention - Up to that time they had admitted 140 cases of the disease - 12 of which had proved fatal, and 26 remained under treatment on that day - on the 20th the report was that they had admitted 15, and

lost 14 leaving 27 under treatment; and from that time out the disease continued to spread, both in the Wards of their Hospitals, where Typhus Fever was prevalent, and in the Camps of the several Divisions of their Army -

At the time when Cholera broke out the French, and English occupied, an old Turkish Banack divided into two quadrangles, as their general Hospital, these quadrangles were separated from each other by a wide open passage secured at each end with gates, & gate houses - Into this common passage there was a communication from each quadrangle, but soon after the joint occupation the communication from the British quadrangle was boarded up - and a gate opened at the opposite, or North side of the square - When Cholera was reported to have made its appearance in the French portion of the building still stricter means of segregation were adopted; but in vain, so far as Cholera was concerned, for on the night of the 20th a man was seized with the disease on the ground floor of the Ward on the right hand side of the entrance gate, the most distant point in the whole building from the French Hospital, and died in a few hours - The following day another man was attacked in the same Ward within three beds of the first case, and died in the afternoon - he had been 18 days in Hospital, and was convalescent from fever - and from this time forward attacks both in Hospital, and amongst the troops encamped round Varna became common - Several cases occurred among the batches of recruits landed from the Vulcan, and Bangor Steamers -

The tendency to Cholera about this time was general - as it prevailed at Gallipoli - some slight cases occurred at Scutari, and on reference to the Returns I find that a severe, but not fatal, case of Cholera occurred in a gunner and driver of the Royal Artillery at Wadyne on

Results of daily Meteorological Observations taken at the Castle Hospital, Balaklava, week ending 14th August 1855.

Date	Mean Reading of Barometer	Barometers				Self Registering		Mean temp. of day	Daily range of temp. - foot air	Wet bulb	Wet bulb - foot air
		Days of Sun	Dry	Wet	High	Low					
July 29	29.413	77	90	75	72	76	72	79	14	5.05	
30	29.430	81	96	77	71	76	66	76	20	7.40	
31	29.512	83	96	80	74	87	62	74.5	25	8.11	
Aug. 1	29.366	68.6	-	66	65	72	63	67.5	9	6.72	
2	29.452	75.6	96	73	67	78	66	72	12	6.53	
3	29.650	79.6	116	77	69	78	65	70	10	6.71	
4	29.665	81.7	114	79	69	88	60	74	28	6.45	

The reading of Barometer increased towards the end of the week. The highest reading the mean height of the Barometer was 29.471 - week was 26 being the difference between Rain came on with thunder and lightning late on the 1st 3.276 inches of rain fell on these days.

Observations taken at the Castle Hospital, Balaklava, week ending 14th August 1855.

Vapour	Degree of Humidity	Direction of Wind	Aspect of Sky	Rain in inches	State of clouds, prevailing							
					✓	✓	✓	✓	✓	✓		
1.26	86	W.	hazy		1401	1608	267	122	87	75	875	
2.49	74	S.W.	clear		1354	1604	222	109	93	85	874	
2.70	75	S.W.	hazy	1.134	1371	1497	243	110	89	57	853	
0.36	94	W.	hazy	2.142	1394	1578	283	118	89	88	855	
2.23	74	W.	clear		1417	1560	283	127	90	90	874	
3.18	67	N.W.	clear		1406	1534	256	126	86	95	878	
4.65	61	N.	clear		1440	1571	259	112	87	100	876	
					Total	10711	11007	1995	846	851	623	8262

from the 29th to the 30th decreased on the 1st and was 29.69 on the 14th. The lowest 29.35 on the 1st. The mean temperature was 73.2. The range for the highest reading on the 14th and lowest on the 31st on the 31st at 10 o'clock P.M. and continues till

(Signed) J. D. Johnson M. D.
Surgeon I. R. S.

Results of daily Meteorological Observations taken at the Beske Hospital, Balaklava, the week ending 11 August 1855.

Date	Mean Barom.	Thermometers					Mean Daily Temp.		Range	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales
		at sun	at air	at wet bulb	at dry bulb	at high	at low	at day										
Aug. 5	29.52	81.2	106	79	67	57	62	74.5	25	5.34								
" 6	30	83.6	122	82	70	91	68	79.5	23	6.41								
" 7	30.5	83.7	116	80	70	90	65	77.5	25	6.66								
" 8	30	82.2	108	79	71	84	63	73.5	21	7.12								
" 9	29.72	80.7	100	83	73	91	64	77.5	27	7.30								
" 10	30	83	114	84	73	86	66	71	21	7.53								
" 11	30.3	83.3	120	81	73	91	73	12	18	7.57								

The Reading of the Barometer decreased the highest reading was 29.63 on the 11th. The Barometer was 29.456 - The mean Temperature the week was 29°. Thunder and Lightning came strong easterly wind and followed by rain to the

Observations taken at the Beske Hospital, Balaklava, the week ending 11 August 1855.

Barom.	Temp.	Humidity	Wind	Direction	Force	Clouds	Moisture	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales	W. Gales					
29.66	55	76	clear			1468	1539	249	189	101	104	1072											
29.06	58	76	clear			1401	1597	246	149	97	99	2012											
29.15	61	76	hazy			1448	1591	278	132	106	98	2013											
30.38	67	76	hazy	0.634		1469	1616	262	153	106	98	1990											
29.52	61	76	clear			1491	162	246	153	107	99	1996											
29.64	61	76	clear			1500	1646	230	152	111	101	1997											
30.57	68	76	clear			1527	1627	259	145	116	108	2042											
Total													70504	7708	770	106.5	744	707	1689				

on the 7th and increases to the end of the week. The lowest 29.25 on the 7th. The mean height of the water was 76. The range of temperature for on about 4 o'clock P.M. on the 8th attained with extent of 0.634 inches

(Signed) J. H. DePue M.D.
Surgeon I. R. G.S.

Meteorological Observations
Castle Hospital

for the week ending 25 August 1855.
Balaclava.

Date	Baromet.	Air	Thermometer (Fahrenheit)					Mean temperature of day	Daily Range
			sun	6 A.M.	9 A.M.	Highest	Lowest		
19 29.590	75	90	71	62	51	52	66.5	24	
20 29.600	Observations not recorded								
21 29.740	67.3	90	68.7	61	77	52	64.5	25	
22 29.755	70	88	71.7	60.7	52	53	67.5	29	
23 29.685	79	106	77.5	63	51	57	69	24	
24 29.700	80	101	70.5	62	87	61	74	26	
25 29.613	82	110	80	70	89	63	76	26	

Wind	Sky	Rain	Recording Anemometer						
			Force	Direction	Speed	Wind	Wave	Current	Drift
N	Cloudy	—	1167	1419	230	120	107	92	929
N	Clear	—	1460	1020	250	127	117	80	917
N.W.	—	—	1403	1046	267	110	117	96	919
N.W.	—	—	1433	1000	267	110	115	99	929
N.W. S.W.	—	—	1393	1098	271	115	129	51	899
Total			10000	9020	1011	861	816	653	468

The weather becoming sensibly cooler from N.W. but about midday occasionally increased steadily till 22nd throughout the on the 22nd the lowest 29.66 on the 23rd the range of temperature was 37 being the lowest on the 19th & 21st no rain.

Sky generally clear - no rain - Wind generally from the southward - the reading of the Barometer week showed higher - the highest observed was 29.76 mean 29.676 - the mean temperature was 69.5 difference between the highest reading on 25th the

(Signed) J.P. Matthew
A.D. 1855

Meteorological Observations
Castle Hospital

Date	Baromet	Thermometers						Mean Temperature
		Air	Shade	Dry Bulb	Wet Bulb	Self-reg. Therm.	Self-reg. Therm.	
Aug 26	29.640	76.	88.	74.5	62.5	81.	63.	72.
" 27	29.650	74	95.	72.5	61.	80.	51.	65.5
" 28	29.530	74.5	100.	70.5	62.	84.	54.	69.
" 29	29.600	74.	101.	72.5	65.5	85.	63.	74.
" 30	29.670	70.5	-	70.	61.	74.	55.	64.5
" 31	29.630	63.5	-	60.5	54.5	73.	51.	62.
Sept. 1	29.620	67.5	108.	66.5	57.5	66.	51.	58.5

Weather sensibly becoming colder - Sky
N.W. & W. occasionally a gentle breeze from S.
The Barometer, the highest observed being 29.7
29.636 The mean temperature was 66.5 &
between the highest reading on the 29th and the

for the week ending 1st September 1855.
Batalava.

Daily Range	Wind	Sky	Rain	Prevailing Direction								
				Force	North	Bygone	North	West	South	East		
18	N.W. & W.	clear	none	1414	1453	248	115	112	87	907	not	
19	N.W. & W.	-	-	1387	1466	265	113	116	73	886	morning	
20	N.W.	-	-	1377	1465	262	113	112	85	882	morning	
21	N.W. & W.	-	-	1330	1471	237	94	117	18	892	morning	
22	N.W. & W.	cloudy	-	1331	1450	239	87	124	85	914	morning	
23	N.W. & W.	cloudy	-	1330	1416	264	70	118	75	882	morning	
24	N.W. & W.	clear	-	1234	1477	252	67	111	81	866	morning	
				Total	9011	10178	1767	657	820	600	6029	

generally clear - No rain - Wind generally from
in Middle of day - Very little variation in readings
on 30th - Lowest 29.5 on 28th - Mean for baromet.
the range of temperature 34° being the difference
lowest on 27th 31st & 1st.

Signed J. P. Matthews
29.5.55.

Meteorological Observations
Balaklava for the week ending

Date	Barom	Sea	Air	Thermometers						Daily Range
				Shade	6 AM	9 AM	12 Noon	3 PM	6 PM	
Apr. 2	39.72	70.0	57°	68.5	57.5	77	49	63.0	28	
" 3	39.76	72.0	90	70.5	62.0	81	54	67.5	27	
" 4	39.75	72.5	112	71.0	57.5	70	53	65.5	25	
" 5	39.69	70.5	76	68.5	60.5	79	51	65.0	28	
" 6	39.55	69.5	100	68.5	60.5	79	51	65.0	28	
" 7	39.40	76.0	100	73.5	67.0	77	66	71.5	11	
" 8	39.72	57.0	81	65.5	45.0	62	49	55.5	13	

Sky generally clear - No rain
diminution of temperature - Highest reading
39.38 on 7th mean for the week 39.67. The
range of temperature was 32° being the differ-
ence between 2nd & 8th by 49°.

readings at the Castle Hospital
8th September 1855.

Wind	Sky	Rain	Prevailing Winds						
			Dir	Force	Velocity	Direction	Force	Direction	
W.S.	Shade	—	008	1410	369	74	116	91	982
S	Clouds	—	025	1436	267	59	127	90	934
N	Clear	—	070	1411	506	67	23	87	911
N.W.	Clear	—	1278	1471	290	59	27	89	916
S	Clear	—	1277	1512	275	51	81	91	921
N.W.	Cloudy	—	1278	1503	257	48	49	53	951
N	Clouds	—	1234	1435	252	44	60	79	138
Total			3947	10242	1956	402	753	610	6433

High Wind from North on 8th with sensible
fall Barometer 39.50 on 3rd. Lowest reading
measured temperature of the week was 44.7. The
range between the highest on 3rd by 51° the lowest

(Signed) J. P. Matthews
Staff Surgeon

Meteorological Observations
for week ending 5th July

made at Castle Hospital, Balaklava
1855.

Date	Barom.	Air	Thermometer				Mean Body		Wind	Sky	Rain	Remarks	Prevailing Winds						
			Dry Bulb	Wet Bulb	Highest	Lowest	Wet	Dry					North	North East	East	South East	South	South West	West
July 9	39.755	57.0	-	65.5	49	69	42	55.5	27	N.W.	Clear	A few drops of rain	127	400	275	54	132	95	157
" 10	39.635	59.5	75	59	55	70	43	56.5	27	N.W.	Cloudy		176	402	274	41	135	91	151
" 11	39.405	63.5	-	62	58.5	72	52	62	20	N.W.	Cloudy 0.25	W. lightning this night	1125	137	261	37	155	91	950
" 12	39.525	62.0	72	60.5	54	62	49	55.5	13	N.W.	Cloudy 0.30	W. lightning in early evening	1145	130	274	35	150	82	866
" 13	39.670	64.0	70	61.5	56.5	73	50	61.5	23	N.W.	Cloudy		1119	136	275	39	139	86	881
" 14	39.470	64.5	89	62.5	54.5	72	50	61	22	N.W.	Cloudy	Clear with S.E. wind	1092	135	251	33	140	86	839
" 15	39.530	61.5	106	60.5	54	69	50	59.5	19	N.W.	Clear	W. wind	1092	1265	271	25	132	24	891
												Total							
												7964	922	274	274	965	615	6095	

Highest Reading of Barometer 39.70
week 39.610 mean temperature for the week
between highest reading on 13th of 73° & lowest on
rain.

on 9th Inst, lowest 39.38 on 11th mean for the
5th 64. Range of thermometer 32° being the difference
9th of 42° weather windy with an amount of

(Signed) J. P. Matthews
S.S. 22

Meteorological Observations made at the Castle Hospital 22nd Sept. 1855.

Thermometers												Prevailing Winds											
Barom.	Date	Air	Sun	Dry	Highest		Low	Mean	Daily	Wind	Rain	Remarks	North	North-East	East	South-East	South	South-West	West				
					Wet Bulb	Wet Bulb																	
29.425	16	62	65	61	58	67	54	60.5	13	5.0	Cloudy	0.040	Wind	1066	1209	262	24	132	88	824			
29.570	17	59	-	57.5	53	62	48	55	14	0	Cloudy	-	Strong	988	1197	246	24	111	87	825			
29.585	18	58.5	70	58.5	50	61	45	53	16	1.46	Thunder	-	do	979	1167	202	19	126	79	878			
29.560	19	58.5	-	52.5	50	59	45	52	14	0	Cloudy	0.144	do	982	1102	245	18	125	82	824			
29.528	20	56	-	52.5	51.5	60	49	54.5	11	0	Cloudy	0.384	do	985	1172	255	15	119	92	876			
29.735	21	61.5	72	60.5	56	65	51	58	14	0	Clear	0.024	do	989	1165	255	16	121	80	832			
29.735	22	62.5	100	61.5	56	70	52	61	15	0	Clear	0.336	do	982	1126	257	21	124	99	785			
Total													8969	1121	1765	140	469	617	522				

Highest reading of Barometer 29.85
 week, 29.605 - Mean temperature for this week
 between the highest reading of 70 on 22nd lowest of 45

on the 22nd. Lowest 29.410 on 16th mean for the
 week 26.3 Range of thermometer 25th being the difference
 on the 19th weather cloudy with a good deal of rain

(Signed) J. P. Matthews
 23rd Sept

Meteorological Observations
for the week

made at the Castle Hosp. Palatlava
ending 29th Sept 1855.

Date	Barom		Thermometers						Mean		Winds	Sky	Rain	Remarks	Precipitation												
	Mer.	Ter.	Air	Shade	Wet Bulb	Dry Bulb	Wet Bulb	Dry Bulb	Wet Bulb	Dry Bulb					Hour	Direction	Quantity	Clear	Partly	Cloudy	Thunder						
Sept 23	29.710	60.5	92	60.0	54.5	67	49	58.0	10	N.W. S.W.	Clear										935	108	240	16	129	95	782
" 24	29.685	62.5	94	61.0	56.0	70	49	57.5	21	N.	Clear										911	108	249	13	135	99	837
" 25	29.420	60.5	98	59.0	52.5	66	48	57.0	18	N.E. W.	Clear										883	1052	235	13	136	99	845
" 26	29.530	57.5	-	56.0	55.0	59	54	56.5	5	N.	Clear	0.480	High Wind								832	998	231	12	130	93	852
" 27	29.635	53.5	84	52.0	45.5	60	44	52.0	16	N.	Clear		High Wind								807	999	221	11	134	102	836
" 28	29.860	49.5	-	48.5	46.0	62	37	47.5	25	N.	Cloudy										825	978	224	13	133	104	839
" 29	29.725	60	69	57.5	53.5	68	42	55.0	26	N.W. S.W.	Cloudy										825	964	226	12	136	107	875
											Total																
											407.8	117.5	1606	90	946	492	868										

The highest reading of the Barometer
being wind, & the lowest 29.39 before the commencing
mean temperature of the week 55.36. The range
the highest reading on 24th viz 70 and the lowest

was 29.97 on the 27th at the termination of the
month on 28th. Mean for the week 29.712. The
temperature was 83.5 being the difference between
on the 26th viz 37.

Signed J. S. Matthews
A. S. L. C.

Meteorological Observations
for the week ending

made at the Castle Hospital Balaklava
6 Oct. 1855.

Date	Baromet. (inches)	Thermometers						Mean temp. of air
		Air	Shade	Wet bulb	Wet bulb with wind	Self temp.	Self temp. of water	
Sept. 30 th	29.690	59.0	96	57.5	53.5	65	46	55.5
Oct. 1 st	29.780	61.0	90	57.5	53.0	65	45	56.5
" 2 nd	29.635	62.0	92	60.5	58.0	69	48	58.5
" 3 rd	29.525	61.0	99	60.0	56.5	67	47	57.0
" 4 th	29.405	65.0	104	66.5	60.0	70	58	64.0
" 5 th	29.475	66.5	-	64.5	63.5	71	57	64.0
" 6 th	29.570	64.5	-	62.0	59.5	70	52	61.0

Daily Temp	Wind	Sky	Rain	Prevailing Winds						Wet bulb temp.
				Force	Direction	Force	Direction	Force	Direction	
19	W	Clear		810	939	206	13	134	104	87.5
23	W. S.W.	Clear		809	917	223	11	143	104	86.9
21	W. S.W.	Clear		809	917	212	12	140	105	86.6
20	W. S.W.	Clear		735	910	208	11	133	104	86.2
12	S.E.	Cloudy	0.005	699	885	204	14	137	100	85.0
14	Calm	Cloudy	0.352	716	883	177	11	140	97	87.2
18	W. S.W.	Cumula		723	831	181	12	128	101	87.5

Weather generally fine -
Barometer 29.78 on the 1st. Lowest reading
29.574. The mean temperature for the week
the difference between the highest reading viz 71°

Rain on 14th & 15th. Highest reading of the
29.40 on the 4th (with rain). Mean for the week
59.5. The range of temperature was 26° being
on the 5th lowest viz 65° on 1st.

(Signed) J.P. Matthews
S. at 2 P.

Meteorological Observations
for the week ending

made at the Castle Hospital, Salaklava
13 October 1855

Date	Thermometers								Mean temp. - at 5	Daily range	Wind	Sky	Rain	Reading Barrels						
	Baromet. pressure	Air	Shade	Day bulb	Night bulb	Highest temp. - at 4	Lowest temp. - at 5	Wet bulb						Dry bulb	Wet bulb	Dry bulb	Wet bulb	Dry bulb	Wet bulb	Dry bulb
Oct. 7	29.575	63.50	94	62.00	59.50	72	50	61.0	22	N.E.	clear		712	852	175	14	147	94	900	
" 8	29.645	64.00	92	62.50	57.00	71	48	59.5	23	N.W.S.	clear		710	858	16	17	157	97	909	
" 9	29.600	65.00	71	63.50	61.00	69	57	60.0	8	S.W.S.	clear		713	851	149	17	164	96	984	
" 10	29.430	73.25	75	72.00	67.00	75	60	67.5	15	S.E.	clear		690	846	152	18	181	95	1075	
" 11	29.300	66.50	72	63.50	60.50	65	64	66.0	4	N.W.	cloudy	0.010	682	836	159	18	171	102	1013	
" 12	29.435	66.50	75	64.75	61.00	71	57	64.0	14	W.	sunb.	0.012	693	853	149	20	176	107	998	
" 13	29.375	65.50	118	64.00	60.50	68	58	63.0	10	W.	sunb.		707	834	140	21	174	118	1002	

The highest reading of the Baromet.
mean for the week 29.474 Mean temperature
the difference between the highest reading on the
South east on the 10th with high reading of Baromet.

was 29.66 on the 8th & the lowest 29.30 on the 11th
for the week, 65.56 & the range of temperature 27° being
10th & the lowest on the 8th & slight gale from the
the change in the night to W. with sun.

(Signed) J. P. Matthews
13.10.55

Meteorological Observations
for the week ending

made at the Castle Hosp. Dalatklauas
28th October 1855.

Date	Baromet. inches	Thermometers					Mean temp.	Daily range	
		Air	Shade	Wet bulb	Dry bulb	Wet bulb depression			
Oct. 14	29.585	65.50	91.	61.50	57.00	70	53	61.5	17
" 15	29.655	69.00	96.	65.50	57.00	76	59	63.0	26
" 16	29.560	76.00	84.	70.75	57.50	78	66	72.0	12
" 17	29.595	84.75	100.	63.00	55.00	71	51	61.0	20
" 18	29.635	86.50	80.	64.50	60.75	71	52	61.5	19
" 19	29.725	59.75	75.	59.25	54.50	66	48	57.0	18
" 20	29.715	70.25	71.	63.25	59.25	71	54	62.5	17

Wind	Sky	Rain	Prevailing Direction						
			North	North East	East	South East	South	South West	West
W.	clear	none	67.3	307	143	21	111	118	947
N.	clear	-	680	308	167	19	168	144	968
S.E.	clear	-	672	326	142	21	170	115	976
W.	clear	-	666	334	134	20	116	125	1013
N.	cloudy	-	662	344	140	26	134	113	1059
N.E. & S.E.	clear	-	660	344	140	24	169	113	1039
W. & S.	cloudy	-	659	354	131	24	163	107	1065

The highest reading of the Barometer
was 29.85 on the 19th. The lowest 29.50 on the 14th.
Mean for the week 29.655. Mean temperature
62.5; being the difference between the highest
15th. No rain - on the 16th a strong breeze
drifted from the S.W.

(Signed)
J. P. Matthew

S. S. 20

Meteorological Observations
for the week ending

made at the Castle, Hong Kong, Balaklava
27th October 1855.

Date	Baromet.	Thermometers							Daily Range
		air	sun	dry bulb	wet bulb	highest temp. by day	lowest temp. by night	mean temp.	
Oct. 21	29.665	57.25	-	55.75	50.25	59	51	55.00	5°
" 22	29.755	58.50	-	57.00	51.75	65	46	55.00	5
" 23	29.690	62.00	76	60.00	50.00	63	57	60.00	6
" 24	29.840	49.75	72	48.25	43.25	59	36	47.50	23
" 25	29.730	50.75	90	52.50	47.00	64	35	49.50	29
" 26	29.740	57.75	90	57.00	50.00	65.5	42	53.75	23.5
" 27	29.710	56.00	92	54.75	50.00	65.5	42	53.75	23.5

Wind	Sky	Rain	Prevaling Directions						
			North	North-East	East	South-East	South	South-West	
N.	cloudy		638	226	138	24	165	16	1056
N.	cloudy		661	910	131	35	166	109	1066
N.	clear		440	889	131	30	173	109	1079
N.	clear		649	904	125	34	173	105	1076
N.W.	clear		600	546	117	35	151	101	1024
N.W.	clear		561	502	115	29	141	101	1011
N.W.	clear		548	777	115	31	151	97	1025

The highest reading of the Baromet. the 21st. Mean for the week 29.775 - Mean of temperature 50.5 being the difference between 25th. No rain.

ometer was 29.88 on the 25th & the lowest 29.65 on temperature for the week 53.57 and the range the highest readings on the 26th & 27th & the lowest on the

(Signed) J.P. Marshall
S. J. H.

6
27 95
1075

Meteorological Observations
for the week ending

made at the Castle Hosp^l Balaklava
5 November 1855.

Date	Baromet		Thermometer					Mean temp ^r -altim	Daily range
	Baromet	Air	Sea	Dry bulb	Wet bulb	Highest temp ^r -altim	Lowest temp ^r -altim		
Oct. 28 th	29.675	56.00	95	53.25	51.00	64	42	53.00	22
" 29 th	29.680	56.75	94	53.25	52.00	65	42	53.50	23
" 30 th	29.650	55.00	97	53.75	52.50	64	40	52.00	24
" 31 st	29.605	65.00	79	63.50	52.75	70	47	58.50	23
Nov. 1 st	29.70	74.25	83	73.25	56.50	76	64	70.00	12
" 2 nd	29.710	76.00	80	75.25	58.75	76	66	71.00	10
" 3 rd	29.695	84.75	102	63.00	58.50	69	52	60.50	17

Wind	Sky	Rain	Dew-points Prevailing						
			Wind	Wet bulb	Dry bulb	Clear	Wet bulb	Wet bulb	Wet bulb
N.W.	clear	none	550	509	117	26	155	96	1065
N.W.	clear	—	564	777	123	27	161	103	1055
N.W.	clear	—	565	776	125	30	167	103	1057
W.	cloudy	—	566	713	127	28	170	108	1042
S.E.	clear	—	558	766	120	29	164	114	1067
S.E.	clear	—	544	734	133	27	164	113	1014
S.E.	clear	—	562	715	136	27	71	111	1019

The highest reading of the Barometer
31st - mean for the week 29.676 - mean temperature
the difference between the highest reading on the
S.E. on 1st 2nd & 3rd with high state of the thermom

was 29.72 on the 2nd and the lowest 29.55 on the
for the week 59.79. the range of temperature 38th being
1st & 2nd and the lowest on the 30th strong breeze from
the and much dryness of air.

(signed) J.C. Matthews
Oct. 28.

Meteorological Observations
for the week

made at the Castle Hospital Station
during 10 Nov. 1855.

Date	Baromet. height	Thermometers.						Mean temperature
		Air	Surf soil	10ft soil	10ft shaded	10ft shaded screen	10ft shaded screen	
Nov. 4	29.700	71.50	80	70.50	56.00	75.0	55	66.50
5	29.870	65.50	98	67.50	60.25	74.0	56	65.00
6	29.838	66.25	94	63.25	55.75	67.5	48	57.75
7	29.777	51.50	90	51.00	48.25	62.5	40	51.25
8	29.760	53.50	112	52.50	49.50	60.0	46	53.00
9	29.750	57.50	104	56.50	53.50	58.5	58	58.25
10	29.705	52.00	76	50.50	47.50	55.0	43	50.50
								53.03

Daily range	Winds	Sky	Rain	Traveling Baromet.						
				Winds	Winds	Winds	Winds	Winds	Winds	Winds
17.0	S.E.	Clear	—	576	723	137	27	163	111	206
15.0	S.	Clear	—	596	738	140	28	165	114	207
19.5	S.E.	Clear	—	594	735	148	28	163	112	202
22.5	S.	Clear	—	604	743	152	28	162	107	207
14.0	S.	Clear	—	606	704	109	28	162	105	209
20.5	W.	Clear	—	616	746	153	28	177	110	208
15.0	N.W.	Cloud.	—	604	665	128	27	161	113	207

The highest reading of the
Baromet. was 29.87 on the 5th and the lowest
29.70 on the 4th. Mean for the week 29.754 -
temperature 57° being the difference between
the 9th. The strong breeze from the S.E. at
temperature abated on the 14th (with the least
fall till the 6th when the wind shifted to the North

Baromet. was 29.89 on the 6th and the lowest
Mean temperature for the week 56.05 the range
the highest reading (29.75) on the 14th and the lowest
the end of last week with successive degrees of
reading (Baromet.) but did not entirely disappear
with considerable diminution of temperature

Byms J. P. Mathew
J. J. 20

Meteorological Observations
for the week

made at the Castle of St. Balaklava
ended 17th Nov. 1855.

Date	Baromet	Thermometers						Mean temp
		Air	Shade	Wet bulb	Wet bulb in shade	Wet bulb in sun	Wet bulb in sun	
Nov. 11	29.748	49.50	48.50	48.50	48.50	48.50	48.50	
" 12	29.935	48.00	56	47.25	44.50	52.5	45.25	
" 13	29.905	52.75	65	52.00	49.50	59.0	50.00	
" 14	29.900	51.25	84	50.75	47.50	57.0	46.50	
" 15	29.855	49.00	-	48.50	46.50	54.0	48.50	
" 16	29.870	48.00	-	46.50	42.50	51.0	46.50	
" 17	29.890	48.25	-	47.50	40.00	54.0	47.00	

Daily Range	Wind	Sky	Rain	Preceding Baromet						
				11	12	13	14	15	16	17
19	S.	Cloudy	-	602	651	124	24	190	116	970
19.5	S.	Cloudy	-	602	669	122	22	195	103	980
18	S.	Cloudy	-	650	672	29	21	202	103	1017
21	S.	Clear	-	620	663	129	21	209	128	1027
17	S. & S.E.	Cloudy	-	623	611	131	23	204	121	1022
9	S.W. & W.	Cloudy	-	625	626	136	20	228	120	1078
14	S. & W.	Cloudy	-	624	577	138	19	220	126	1093

The highest reading of the
Baromet was 29.92 on the 13th and the lowest
29.74 on the 11th. Mean for the week 29.853.
Range of temperature 23° being the difference
between the highest reading on the 13th and
lowest on the 11th. - No rain -

Baromet was 29.92 on the 13th and the lowest
29.74 on the 11th. Mean for the week 29.853.
Range of temperature 23° being the difference
between the highest reading on the 13th and
lowest on the 11th. - No rain -

(Signed) J. P. Matthew
L. S. S.

Meteorological Observations
for the Week ended

made at the Castle Hospital, Balaclava
24 Nov. 1855

Date (Month)	Baromet.	Thermometers						Daily Range	Wind	Sky	Rain	Prevalent diseases							
		Air	Shade	Dry bulb	Wet bulb	Highest temp. during day	Lowest temp. during night					Measles	Whooping Cough	Diphtheria	Scarlet Fever	Small Pox	Typhoid	Other	
Nov. 18	29.890	47.00	-	46.25	43.50	53	41	47.00	12	N.W.	Cloudy	-	622	561	153	18	222	125	1006
" 19	29.775	46.50	68	45.00	40.75	57	42	46.50	9	N.W.	Clear	-	631	553	153	17	226	121	1015
" 20	29.665	42.50	-	41.25	40.25	44	39	36.50	5	N.W.	Cloudy	328	641	545	145	17	225	127	1021
" 21	29.575	31.50	-	30.75	30.75	37	30	32.50	7	N.	Cloudy	-	638	538	140	18	234	134	1044
" 22	29.640	38.50	-	38.25	36.75	40	27	33.50	13	S.W.	Cloudy	-	643	550	138	19	248	136	1057
" 23	29.590	46.00	-	45.00	42.50	50	36	43.00	14	N.E.	Cloudy	-	617	543	132	15	251	134	1078
" 24	29.605	50.75	-	50.00	46.25	54	40	47.00	14	S.E.	Cloudy	-	624	585	131	16	246	136	1069
							41.00												

The highest reading of the Bar. 21st mean for the week 29.669. Mean temperature 27° being the difference between the highest a strong breeze from the North West on 20th & 21st, amount of snow on the latter,

ometer was 29.90 on 18th and the lowest 29.55 on the 21st. The range of the week, 41° and the range of temperature on the 24th and the lowest on the 22nd with rain on the former day, and a small amount of snow on the latter.

Signes J. P. Malins
d. d. 24.

Meteorological Observations
for the week ended

made at the Asylum Hospital, Balaklava
1 Dec. 1855-

Date	Baromet.	Thermometers							Daily Range
		Air	Sun	Sh. Bulb	Wet Bulb	Highest temp. of day	Lowest temp. of day	Mean temp.	
Nov. 26	29.260	50.00	-	53.00	52.00	54	48	47.00	6
" 26	29.668	37.25	-	57.00	35.75	39	32	35.50	7
" 27	29.625	28.50	-	20.50	20.50	27	22	24.50	5
" 28	29.038	43.00	-	42.50	42.00	27	34	40.50	13
" 29	29.425	38.75	-	38.50	37.00	40	34	37.00	6
" 30	29.380	42.50	44.00	42.00	38.00	47	28	39.50	23
Dec. 1	29.110	43.50	-	43.50	43.50	44	36	40.50	8
								38.20	

Wind	Sky	Rain	Prevailing Diseases						
			Small Pox	Measles	Scarlet	Dysentery	Cholera	Diarrhoea	Other
N.E. S.W.	Cloudy	1.620	625	578	132	19	253	132	1068
"	"	.072	624	522	132	18	268	134	1057
"	"	.096	605	531	133	17	277	133	1058
"	"	.104	621	523	136	20	296	135	1062
"	"	.432	640	529	136	16	309	148	1069
S.E. S.W.	Cloudy	.468	613	579	113	14	310	150	1064
S.W.	Cloudy	.468	601	489	106	15	292	159	1018

The highest reading of the Barometer was 29.668 on the 26th. Mean for the week 29.293. Mean bar. high winds from the north for few days and quantity of snow on the 27th. Rain fell to the extent

was 29.46 on the 26th, and the lowest 29.00 on the 27th. Mean for the week 38.25. Weather cloudy, with from the southwest for the first & last, a small of 3.384 inches.

(Signes) J. V. Mathew
Dec. 26.

Meteorological Observations
for the week

taken at the Castle Hosp^l Balaklava
ended 8 December 1855.

Baromet	Date	Amund air	Thermometers					Mean temp ^r - actual	Daily Range	Wind	Sky	Rain	Prevalent Diseases							
			Sun	Dry Bult	Wet Bult	Highest temp ^r - actual	Lowest temp ^r - actual						Mumps	Dysent ^y	Jaund ^y	Cholera	Typh ^{us}	Small Pox	Other Diseases	
	Dec 2	29.235	42.50	—	42.00	37.50	45.00	38.00	41.50	7.00	all	Clouds	.956	534	487	109	14	318	148	1009
	" 3	29.420	39.50	—	36.75	36.00	43.50	31.00	37.25	12.50	SW by S	Cloudy	—	578	483	109	13	290	158	958
	" 4	29.100	47.00	—	45.75	45.75	55.00	39.00	47.00	16.00	SW by S	S	.556	576	489	113	14	314	160	957
	" 5	29.150	39.75	—	39.00	37.50	61.50	28.00	44.50	32.00	N by S	S	.014	579	491	109	15	327	161	965
	" 6	28.980	42.75	—	42.00	41.00	45.00	40.00	42.50	5.00	S	S	.476	579	489	102	13	352	189	986
	" 7	29.250	53.25	65	52.75	50.00	56.00	40.00	48.00	16.00	all S	Clouds	.021	568	479	116	14	345	169	1012
	" 8	29.350	46.00	—	44.50	42.00	58.00	44.50	51.00	14.00	N	Cloudy	.224	539	449	104	13	342	152	1025
									44.53											

The highest reading of the Barometer
mean for the week 29.219 - Mean temperature of
week 53° being the difference between the highest
Southern breeze, and the lowest 51° 28 on the 7th.
North - high winds from N. on 4th 4th and from
inches of rain fell during the week.

was 29.40 on the 3rd the lowest 28.90 on the 6th -
the week 44.534 Range of temperature for the
reading 29.61 on the 5th in the afternoon with a
very fine sunny day with a strong breeze from the
South on 6th with low reading of Barometer 1.147

(Signed) J. C. Mathew
28.12.55

Meteorological Observations made at the Castle Hospital
Balaklava - for the week ended 15th Decr 1855.

Date	Barometer		Thermometers					
	Baromet.	Air	Sun	Dry Bulb	Wet Bulb	Highest Temp. of Day	Lowest Temp. of Night	Mean Temperature
Decr 9	29.230	53.00	-	52.50	50.50	54.00	36.00	45.00
Do 10	29.460	41.75	-	41.50	35.75	45.00	32.00	38.75
Do 11	29.590	37.00	-	36.25	34.00	37.00	32.00	34.50
Do 12	29.225	36.50	55.00	35.25	29.50	37.00	36.00	46.50
Do 13	29.125	27.50	31.00	27.50	27.50	27.50	26.00	26.75
Do 14	29.075	29.50	-	29.50	29.50	31.00	28.00	29.50
Do 15	29.200	27.50	49.00	27.50	27.50	30.00	24.00	27.00

Daily Range	Wind	Sky	Rain	Precipitating Success						
				Hours	Minutes	Grains	Lines	Spots	Streaks	Other
10.00	S.E. Cloudy	.050	532	452	101	15	339	157	1012	
13.50	S. Do	.022	573	452	102	13	649	154	1022	
5.00	S. Do	-	526	449	105	21	352	100	1010	
21.00	S.E. & N. Cloudy	.090	526	465	103	19	369	164	1042	
1.50	S. Annul.	-	528	475	104	20	365	167	1040	
3.00	S. Cloudy	-	552	480	104	20	384	169	1084	
6.00	S. Clear	-	543	466	95	18	576	179	1062	

The highest reading of the barometer was 29.59 on the 11th and the lowest 29.02 on the 14th. Mean for the week 29.283. The mean temperature being the difference between the highest reading and the lowest divided by the number of days. Rain fell on 9th, 10th, & 12th to the amount of 0.588 inches. A small amount of drifting snow on the 15th.

was 29.59 on the 11th and the lowest 29.02 on the 14th. Mean for the week was 29.283. The range of temperature 35° to 57° on the 12th and the lowest 24° on the 15th. On the last named day with a gale from the S.E.

J. O. Malcher
15 Decr 1855

Meteorological Observations
for the week

made at the Castle Hospital Ballinacorney
ended 22 Decr 1855.

Date	Barometer		Thermometers					Mean temp ^r in shad ^e
	Current	Air	Low	Day Bolt	Night Bolt	Highest Temp ^r in shad ^e	Lowest Temp ^r in shad ^e	
Dec. 16	29.402	24.00	30.00	24.00	24.00	26	18	22.00
Do 17	29.260	35.50	—	35.50	32.50	36	20	30.00
Do 18	29.300	40.50	—	39.50	36.00	44	29	36.50
Do 19	29.800	7.75	—	7.75	7.50	9	2.5	5.75
Do 20	30.025	18.00	—	18.00	18.00	22	9	15.50
Do 21	29.620	30.50	—	30.50	30.50	35	12	23.50
Do 22	29.810	42.50	—	41.00	38.50	44	33	38.50
								24.53

Daily Range	Wind	Sky	Rain	Resisting Diseases						
				Went	Spent	Went	Went	Went	Went	Went
8	S.	Clear	—	574	454	102	19	580	170	1026
12	S.W.	Cloudy	Some	595	466	101	11	597	169	997
15	W.	Do	Some	523	470	96	21	402	170	905
6.5	S.	Do	—	522	453	94	21	405	170	1028
13	S.	Clear	—	523	489	83	20	411	150	1066
23	S.	Cloudy	—	491	460	92	22	432	177	1262
11	S.	Do	—	484	450	96	19	452	175	1264

The highest reading of the
on the 17th mean for the week 29.602 mean temper.
the week 41.5 being the difference between the
on the 19th snow fell on 17th and 18th and on

Barometer was 30.03 on the 20th & the lowest 29.26
at the end of the week. 24.54 Range of temperature for
highest reading viz 44 on the 18th & the lowest viz 2.5
19th & 20th there was a strong breeze from the north.

(Signed) J. P. Matthews
26. 12. 55.

Meteorological Observations made at the Castle Hosp^l week ended 29th Dec 1855.

Observations made at the Castle Hosp^l week ended 29th Dec 1855.

Date	Thermometers							Mean temperature
	Baromet ^r	Air	Shade	Dry Bulb	Wet Bulb	Highest dely. equinox	Lowest do. equinox	
Decr 23	29.870	40.75	45	40.00	38.75	43	32	37.50
24	29.450	34.50	55	33.00	32.50	39	27	33.00
25	29.780	33.75	56	33.00	31.00	36.5	25	32.75
26	29.650	35.75	75	35.00	33.75	39.5	27	33.25
27	29.625	30.50	48	30.00	30.00	32.0	25	28.50
28	29.750	30.00	~	29.00	29.00	30.	21	28.50
29	29.835	27.00	50	26.00	25.50	29.	22	25.50
								30.57

Daily Range	Wind	Sky	Rain	Prevailing Diseases						
				Measles	Scarlet	Dysentery	Cholera	Relapsing	Smallpox	
11	S.	clear	-	452	422	91	14	458	160	267
12	S.	cumula	-	439	398	86	18	457	162	244
11.5	S.	clear	-	423	349	74	13	436	107	171
12.5	S.	So	-	417	341	74	13	431	153	188
7.	S.	cumula	-	432	339	79	13	447	151	215
9.	S.	cloudy	-	441	348	67	14	457	159	195
7	S.	cumula	-	446	359	74	13	465	157	208

The highest reading of the Barometer was 29.87 on the 23rd and the lowest 29.45 on the 24th. Mean for the week 29.709. The highest reading of the thermometer was 45 on the 23rd and the lowest 21 on the 28th. Mean for the week 30.57. Thick fog on the night of the 24th and the morning of the 25th and 26th.

Signed J. B. Matthews
M.D.

The highest reading of the Barometer was 29.87 on the 23rd and the lowest 29.45 on the 24th. Mean for the week 29.709. The highest reading of the thermometer was 45 on the 23rd and the lowest 21 on the 28th. Mean for the week 30.57. The weather generally fine and clearing of the 27th. Strong breeze from the North on the 27th.

Meteorological Observa-
tions made at the Castle Hospital
Balutlaka - for the

week ended 5th January 1886.

Date	Baromet.		Thermometer.					
	Mercur.	Aer.	Dry bulb	Wet bulb	Highest temp. during day	Lowest temp. during day	Mean temperature	
Dec 30 th	29.900	29.00	48.00	28.50	28.00	53.00	25.00	29.00
" 31 st	29.968	31.50	35.00	31.00	31.00	31.50	26.50	28.00
Jan 1 st	29.915	30.75	"	30.00	30.00	32.00	29.00	30.60
" 2 ^d	29.725	27.25	"	27.25	27.25	33.00	26.00	29.50
" 3 ^d	29.690	30.25	"	33.75	32.25	38.00	24.00	31.80
" 4 th	29.625	36.50	43.00	35.50	35.00	35.00	32.00	35.00
" 5 th	29.595	28.25	43.00	26.50	26.50	32.00	24.00	28.00

The highest reading of the Baromet. was 29.97 on the 31st and the lowest, 29.59 on the 5th. Mean for the week 29.774 - range 14th being the difference between the highest 29 on the 3^d and 5th. Snow fell on the 14th and 4 inches on the former and 2 inches on the

Daily Range	Wind	Sky	Rain	Prevailing Diseases						
				Fever	Dysent.	Diarrhoea	Cholera	Malaria	Other	
8.00	N. Breeze	-	-	438	56	74	13	567	156	1810
4.80	N. Cloudy	-	-	437	341	73	13	567	157	1897
3.00	N. Do	-	-	450	519	75	19	553	157	1897
7.00	N. Do	-	-	450	502	79	15	554	170	1865
4.00	S. S. B. Do	-	-	445	321	79	13	547	93	1892
6.00	S. S. B. Do	-	-	448	280	87	11	549	165	1852
8.00	N. Breeze	-	-	455	304	71	11	577	168	1878

Baromet. was 29.97 on the 31st and the lowest, 29.59 on the 5th. Mean for the week 29.774 - range 14th being the difference between the highest 29 on the 3^d and 5th. Snow fell on the 14th and 4 inches on the former and 2 inches on the latter day.

(Signed) J.P. Mathias.
21.1.86.

Meteorological Observations
for the week ended

made at the Castle Hosp^l Balaklava
12 Jan^y. 1856.

Date	Baromet ^r (Mercur)	Thermometers.						
		Air	Shin	Dry Bulb	Wet Bulb	Highest ^{at 5 P.M.} Temperature	Lowest ^{at 5 A.M.} Temperature	Mean
Jan ^y 6 th	29.650	22.00	53.00	21.75	21.75	25.00	15.00	21.50
" 7 th	29.485	43.00	48.00	42.00	39.50	44.00	25.00	36.50
" 8 th	29.330	48.00	"	47.50	44.00	48.00	41.00	44.50
" 9 th	29.260	55.50	"	54.75	50.50	57.00	46.00	51.50
" 10 th	29.340	53.25	62.00	52.50	51.00	52.00	48.00	51.00
" 11 th	29.355	51.75	"	51.50	49.50	53.00	45.00	48.00
" 12 th	29.320	53.00	81.00	52.50	51.25	59.00	45.00	52.50

Daily Range	Wind	Sky	Rain	Prevailing Winds						
				Force	Direction	Force	Direction	Force	Direction	
13.	N.	Cloudy	"	455	235	70	11	531	179	1323
19.	S.E. & S.	Clear	"	446	278	77	11	538	181	1310
7.	S.	Cloudy	0.021	426	261	77	11	575	175	1249
11.	S.E.	S.	"	457	244	74	11	539	175	1304
6.	S.E. & S.	Clear	0.103	454	220	65	11	533	177	1320
10.	S.E.	Cloudy	"	432	232	73	9	519	162	1248
14.	S.	Clear	"	458	238	74	9	577	166	1223

The highest reading of the
it gradually decreased with a smart gale
vizt 29.25 was noted. Mean for the week, 29.391
range of temperature 44° being the difference
12th and the lowest 57° 15th on the 6th. Rain

Barometer was 29.65 on the 6th from which date
from the S.E. till the 9th when the lowest reading
Mean temperature for the week 48.14 and
between the highest reading vizt 57° on the
fell on 8th & 10th to the depth of 0.164 of an inch

(Signed) J.C. Marchant
S. S. C.

Meteorological Observations made at the Castle Hospital
Balaklava, for the week ended 19th Jan'y. 1856.

Date	Barometer		Thermometers					
	Mercurial	Air	sun	Wet bulb	Highest	lowest	Mean	
					alt.	alt.	temp.	
Jan'y 13	29.315	42.50	-	42.00	42.00	46.00	41.00	43.50
" 14	29.585	15.00	36	15.00	15.00	15.00	12.00	15.00
" 15	29.825	35.50	"	35.50	32.50	35.50	15.50	28.50
" 16	29.775	38.25	50	35.00	34.75	42.00	26.00	34.00
" 17	29.575	39.75	72	38.50	36.00	42.00	33.00	37.50
" 18	29.675	34.25	58	33.50	31.75	36.00	30.00	32.50
" 19	29.610	41.25	"	40.50	37.00	41.50	30.00	35.75
								31.96

The Barometer rose from 29.30 (the highest reading) on the 15th with a strong north-westerly wind on 13th 414th. Mean temperature of the week 31.96. Mean temperature of the day below the lowest reading 49th 12 on 14th. On the 13th 414th with rain on the former day & a

Daily Range	Wind	Sky	Rain	Prevailing Diseases						
				Meas.	Scarlat.	Dysent.	Cholera	Typhoid	Smallpox	Whooping Cough
5	N.	Cloudy	1.072	449	218	68	8	515	175	140
6	N.	Cloudy	"	460	219	67	8	515	174	140
20	N.	Cloudy	"	457	214	75	8	532	173	136
16	S. E.	Clear	"	458	217	77	6	525	180	138
9	Calm	Do	0.100	458	211	63	6	485	165	115
5.5	N.	Do	0.042	415	210	60	2	475	153	115
11.5	S. W. N. E.	Cloudy	"	373	281	61	2	460	148	102

on the 13th (the lowest reading of the week) to 29.53 only wind on 13th 414th. Mean reading of Barometer week 31.96 and range 34th being the difference between the highest and lowest on 13th. Winds from north and very small amount of drifting snow on the latter (signs)

J. P. Matthews
28.1.56

Meteorological Observations
for the best ends

made at the Castle Hospital Malakka
28th Jan^y. 1856.

Date	Baromet ^r	Thermometers						Mean temperature
		Air	Surf	Dry Bulb	Wet Bulb	Highest Temp ^r of the day	Lowest Temp ^r of the night	
Jan ^y 20 th	29.495	46.00	-	45.50	43.50	47	38	42.50
" 21 st	29.565	49.50	"	48.50	46.00	50	43	46.50
" 22 nd	29.560	52.00	"	49.00	48.00	53	45	49.00
" 23 rd	29.253	51.50	65	51.00	49.50	55	47	50.50
" 24 th	29.440	40.25	"	39.75	39.50	41	39	40.00
" 25 th	29.490	43.75	56	43.25	41.25	49	36	42.50
" 26 th	29.490	49.50	62	48.50	44.00	50	43	46.50
								45.35

The highest reading of
29.22 on 24th Mean for the week 29.379 - Mean
the difference between the highest reading 18th
rain fell on the six first days of the week.

Daily Range	Wind	Sky	Rain	Prevailing Winds							
				Force	Direction	Force	Direction	Force	Direction	Force	Direction
9	W. S.W.	Bendy	0.125	570	201	57	3	465	148	1187	
7	S.E.	Do.	0.620	580	197	57	4	465	137	1182	
8	S.E.	Do.	0.116	398	204	63	4	465	139	1184	
8	S.W.S.E.	Do.	0.136	405	209	60	4	479	147	1178	
2	S.	Do.	0.685	427	218	65	4	477	147	1161	
13	S.	Variable	.130	410	201	66	6	436	131	1136	
7	S.E.	Clear	-	391	178	57	5	402	129	1108	

The Baromet^r was 29.52 on the 20th & the lowest
temperature of the week 45.36 F range 17° being
55° on the 23rd and the lowest 38° on the 20th
to extent of 0.992 inches.

(Signed) J. P. Matthews
A.S. 26.

Meteorological Observations
for the week ended

made at the Castle Hospital Balaklava
2^d Feb^y. 1856.

Date	Thermometers							Mean temp. -ature
	Baromet. pressure	Air	Sun	Dry Bulb.	Wet Bulb.	Highest temp. -ing	Lowest temp. -ing	
Jan ^y 27	29.415	52.00	111.00	52.00	47.50	58.00	46.00	51.50
" 28	29.210	59.75	61.00	59.50	56.75	63.00	52.00	57.50
" 29	29.110	50.50	"	50.00	48.00	53.00	43.00	48.00
" 30	29.520	43.50	"	43.00	41.25	44.00	41.00	42.50
" 31	29.155	48.00	"	47.50	44.25	44.00	38.00	43.50
Feb ^y 1	29.110	31.00	"	30.75	30.75	31.00	30.00	30.50
" 2	29.260	36.50	42.00	36.50	34.50	39.00	27.00	33.00
								43.50

The highest reading of the Barometer
mean for the week 29.236 Range of temperature
highest reading 63° on the 28th & the lowest 27°
Square of Wind from the S.E. on the 28th -
the 1st Sky to extent of 1.294 inches when melted,
of water for the week 1.435 inches

Daily Range	Wind	Sky	Rain	Prevailing Diseases						
				Fever	Dysentery	Diarrhoea	Cholera	Typhoid	Cholera	Other
13	S.E.	Clear	"	384	157	62	4	428	129	1142
11	S.E.	Do	"	391	148	67	4	411	125	1110
10	S.E. & S	Cloudy	"	391	146	66	4	397	110	1146
3	S. & S.W.	Cloudy	"	426	384	154	5	406	130	1154
11	S.E. & S.W.	Do	.003	396	156	54	5	407	126	1154
1	S.E.	Do	1.294	426	163	52	5	433	139	1158
12	S.E.	Do	.012	429	147	53	5	433	132	1158

was 29.420 on the 27th and the lowest 29.10 on the 1st
for the week 36° being the difference between the
27° on the 2^d - Mean temperature of the week 43.79
Thick fog at midday on the 29th Fall of snow on
same on 2^d to 12 Total amount of fall

(Signed) J.P. Matthew
J.P. M.

Metereological Observations
for the week

Baromet. Date (annex)	Thermometers							Mean temper- ature
	Air	sun	dry Bulb	wet Bulb	highest dry Bulb	lowest dry Bulb		
July 3	29.450	57.50	44.00	36.50	34.25	39.00	32.00	34.50
" 4	29.800	29.00	62.00	27.50	26.25	37.50	23.00	30.25
" 5	29.790	31.75	-	30.00	29.75	33.50	20.00	26.75
" 6	29.865	35.75	64.00	36.00	34.00	41.00	27.00	34.00
" 7	29.700	32.50	58.00	32.00	30.50	41.00	27.00	34.00
" 8	29.610	38.00	63.00	37.00	36.00	42.00	27.00	34.50
" 9	29.390	43.75	-	43.25	40.75	45.00	38.00	41.50
								33.64

The highest reading of the Barom-
eter on the 9th Ann for the week 29.390. Range
difference between the highest reading viz^{temperature}
Ann of the week 33.64. Rain Hail & Snow

made at the Castle Hospital Balaclava
ended 9th July 1856

Daily Range	Wind	Sky	Steam	Prevailing Winds						
				North	South	East	West	North- West	South- West	Other
9-00	W.	Cloudy	0.300	239	162	57	3	457	140	112
11-50	S.	Static	0.017	416	160	48	3	429	140	1129
13-50	S.	Cloudy	-	417	162	46	-	419	137	1101
16-00	S.	Bumts	-	406	159	46	-	401	137	1133
14-00	S.	Clear	-	421	156	45	-	432	140	1141
15-00	S.W.	Bumts	0.048	400	153	42	-	421	119	1085
7-00	S.	Cloudy	0.079	403	153	41	-	423	120	1105

eter was 29.820 on the 6th and the lowest 29.37
of temperature for the week 25° being the
45° on the 9th and the lowest viz. 20 on the 4th.
fell on 4 days in the week to the extent of 0.444 inches

(Signed) J.P. Mathew
L.S.R.

- * Rain Hail & Snow
- * Melts Snow
- * Snow & Rain

if it no Medical Arrangements could possibly be made for the Voyage until the Troops were actually embarked. The consequence was that some ships had two or three Medical Men on board, others none, some had Medicines - others none - and all subsequent attempts at arrangement during the short time the ships remained in the bay were unsatisfactory -

It never seemed to have occurred to the Military Authorities, that any provision of the kind was necessary - Altho' the Army had been devastated by Cholera for the six preceding weeks, - and it might have been anticipated that the disease would recur when the men were brought together in crowded Steamers, as actually took place on the Voyage - and many men died - and when the fleet reached Toulga Bay there were about 800 sick on board the different Transports - Here again a difficulty arose in providing conveyance for them to Scutari - and some delay took place in the Principal Agent's naming a Vessel to receive them - at length the Kangaroo Steamer was fixed on, but in place of confining her for the use of the sick The Agent's order directed that, at a given hour, All the sick of the Army - and all the Women who had been permitted to follow their husbands, should be put on board the Kangaroo, and such a scene of confusion as ensued has seldom been witnessed. To add to the difficulties all the berths between decks were lumbered up with the baggage of the Regiment that had just disembarked, The Captain of the Vessel was sorry at having his Ship, what he called, converted into an Hospital Ship, and rather he - his Officers, nor his Crew would lend the least assistance to the unfortunate wretches who were brought on board, and laid down with their parts and arms wherever space could be found, and in short time the decks were completely strewed over, about one o'clock Dr. Dumbreck, who was on

board, sent a message to the Agent of Chamfont, ^{requesting} that the Vessel could receive no more, and the Captain of the Ship hoisted a signal of distress, and stated he had 1500 sick on board - which was a wilful misrepresentation, as the whole number sent down to Scutari in the Kangaroo, and Dunbar only amounted to 750 and nothing like that number was on board the Kangaroo when the signal was hoisted, as Dr. Dumbreck had any property prevented them from being removed from the boats along-side since the Vessel had received as many as she was calculated to carry - In the course of the Afternoon of the 16th September the Dunbar was appointed to receive the Kangaroo's of part of her freight, and 234 were put on board of her leaving 422 on board the Steamer - Both Vessels sailed for Scutari on the 17th and arrived there on the 21st. 7 men died on the passage, which cannot fairly be considered an unusual mortality, and of so many cases of Cholera's disease notwithstanding all that was written, and said, about it, at the time in the public prints - The Army which reached the Nician shore early on, ^{the} morning of the 14th September 1812 - Commenced to disembark immediately, and the day being fine, and the sea smooth, the greater part of the Chinfanters were got on shore in the course of the day, as no opposition was met with from the Enemy - In the course of the night it rained heavily, and blew hard, and the next day there was so much sleet, or that no communication could be held with the shore, on the 16th the weather moderated - and Guns, horses, tents, and material were got on shore, and by the evening of the 18th the Army was prepared to advance - But as no Carriage had been provided beyond some Maltese Carts in the Non-comparant service, and a few Crates that were taken by the Rifles when they first landed, the tents,

comprised of seven kinds were ordered to be re-embarked -
No Ambulance Waggon had been brought, or conveyance of
any kind, for the Sick, and Wounded, the Surgeons recom-
mended that it might, and all the carriages I could obtain
for the Conveyance of Medical Stores - Curvey's Stairs, &
Medicines were five small Country Carts drawn by Oxen -
Three Ambulance Waggon were embarked on board the
London Steamer at Parua at the beginning of September
1841, but were ordered to be re-embarked to make room for a
Squadron of Lancers, which was never sent on board -
In disembarking the Waggon only nine out of twelve could be
got on shore in consequence of the state of the Water, and
the whole of the Mules were drowned, and two-thirds of the
hampers was lost in the operation - so that the three Waggon
left on board the London were utterly useless when landed
on the beach at old fort in the Buina, and what became
of them subsequently I never could ascertain - The only
use that was made of them was a Mischievous one, for a
party of the Pensioner Ambulance Corps, that I had
brought on in the John Masterman Medical Store
Wharf, with several Bears for the conveyance of Wounded
men, when I was refused whelmed conveyance; for the embar-
cation of the 12 Waggon on board the London, and
disembarkation of nine of them was after the Army had sailed
for the Buina - When these useless old Men when they
landed on the beach at old fort, not wishing to be embar-
kled with their bears, asked an Officer of the D. Master
General's Department what they were to do with them, and
he told them, at least so they said, to deposit them in the
empty Waggon - Here they deposited them most
assuredly, and there they left them, and lost themselves
for in overhauling the party on the morning of the 19th
stumping along as an Armed body, without their bears,
and inquiring what they had done with them the Sergeant

coolly told me they had left them in the Waggon on the
beach, as directed by an Officer of the D. Master General's de-
partment when they landed -

They were ordered back for the bears but returned, as
might have been expected, stating they could not find them
- they were given to burn that evening from the presence
of the Waggon, but, with the exception of a few men who
went with the 1st Division, the great body of the Ambulance
were no where to be found when they were wanted with their
stores; Thus giving the crowning proof of the utter
insufficiency of this useless, and expensive body of men

On the morning of the 19th September 1841 - the Allied
Army marched - Vindictes of the Enemy's Cavalry were seen
on all the hills as the Army advanced, and when it reached
Bulgoon, the halting place for the night, about ten miles
from old fort - a strong body of the Enemy was drawn up
across the road on some rising ground a little way in
advance - The 11th Hussars, and 13th Light Dragoons were
pushed forward to drive their skirmishers in, and charge
the main body, but on their approach a heavy body of
Cavalry made its appearance, and the 11th and 13th were
withdrawn a little, and a troop of Horse Artillery ordered
to the front - some skirmishing took place between the
Cavalry squads, without any result; but on seeing the
advance of our guns the enemy brought forward some of
their own, and opened fire on the Cavalry advancing
at the same time three heavy masses of Cavalry to our
right, and throwing out a cloud of skirmishers to our left;
but the fire of our guns, which now amounted to 16, soon
silenced them, and dispersed the Cavalry - The result
of this our first encounter with the Enemy was three horses
killed, and three men wounded, two of them so severely
as to require Amputation of the leg on the spot - the
third had the ankle joint laid open by a piece of shell

but it was thought advisable to attempt to save the limb - a fourth man, who had his horse shot under him, received so severe a concussion of the bullet, as to incapacitate him for duty -

The wounded one, sent down to the sea beach the following morning to be put on board ~~the~~ ship, with about 100 ^{men} who were suffering from Cholera, and Typhus, and unable to march, and we had no means of conveying them - On the 19th the French did not succeed, then Miles the men appeared much distressed by it, and many of them threw away their bottles to lighten their loads, and this practice became almost general afterwards, altho' the men marched without their Knapsacks, or any other incumbrance whatever beyond their haversack, Helmet, and Great coat -

On the morning of the 20th the British Army was under arms at four o'clock - the French with sound judgment allowed their men to breakfast first, and then the whole Allied Army moved about ten o'clock to attack the Enemy's entrenched post on the Colmar river, about five miles distant from the halting place of the previous evening - and at 20 minutes after one the hostile Armies came in collision - The Enemy was strongly posted on the left bank of the river, and supported by redoubts armed with heavy guns - On our approach they set fire to a Village on the right bank of the river, the smoke of which obscured every thing in our front, and enabled them to use their guns with deadly effect, as they had been laid to command all the roads, and approaches to the bridge, and ford -

The French troops attacked and scaled the heights on the Enemy's left, the British attacked their right, and centre, the strongest part of the position, and after a severe struggle of between three and four hours duration succeeded in surmounting it, but with heavy loss, particularly in

the Light - foot, and one or two Regiments of the 2nd Division - and as most of the Wounded were from either Round or Grose shot fired at short range the injuries were peculiarly severe, and numerous operations were required - The Action which commenced at 20 minutes after one did not terminate until a quarter after five when the Enemy retired unbroken and unpursued -

During the Action as many Wounded of the Light and second Divisions as could be found were collected about half a mile in rear of the Centre of the Army - Here the Marquees brought in the reserve Waggon were pitched, bedding, & comforts unpacked, and the Medical Officers sent themselves zealously in affording aid to the Wounded -

The Wounded of the 1st Division were all collected and got under cover in some houses in a Vineyard near the scene of Action, on the night of the 20th; but as it became intemperate, & many men, who had fallen on the same distant, and broken parts of the field, were unavoidably left until the following day, when strong fatigue parties were sent out to collect the Wounded, and bury the dead -

A farm house in the Village, that had escaped the fire, was taken possession of - the whole Ward was littered down deep with hay, and here the wounded, as they were brought in, were placed in rows, - their hurts attended to, refreshment given to them, and their throats were sent down as speedily as possible to the beach, a distance of three Miles, to be put on board ship for transport to Scutari; and in this way 1700 of our own Wounded and many Russians were disposed of by the Evening of the 22nd, an amount of labor & energy on the part of the Medical Staff rarely equalled, and for which they gained no credit, because certain parties chose to consider it might have been done better, and that they could, or should be conducted without hurry, and Confusion in the first instance, and pain and suffering

afterwards - The want of Ambulance conveyance was seriously felt on this occasion, as indeed it was during the whole march from Tel fut to Balaklava, and had it not been for the assistance the Sails of the Fleet gave us, and the loan of the French Ambulances, we could not possibly have got our wounded away in such a short space of time, for it must be borne in mind that Cholera was raging in the Army, particularly in the 4th Division, which endangered us still more - On the morning of the 23rd we succeeded in getting the whole of our own Sick, and Wounded conveyed away, but between 5 and 600 Russian wounded were left, and Assist Surgeon D. Thompson 4th Regiment remained with them - In the course of the two following days these were all removed on board ships by the Sails, and sent to Odessa - Poor D. Thompson returned to Balaklava, & died of Cholera soon after landing -

The Wounds received at the battle of the Alma, as I have already stated, were many of them of the most formidable kind, and numerous operations were required, but no definite information could be furnished by many of the Medical Officers, indeed some did not know the number of Men that had been operated on in this Reg^t from the scattered way the Wounded were collected and attended to - and all were ignorant of the results, as most of the men were sent off soon after they were operated on - Amongst the operations that were performed were four at the Hip joint three of which proved speedily fatal, and the fourth died of hemorrhage on board ship - It is a question in my mind whether this feat of Surgical Sabotism is ever justified, the result is so invariably, and so speedily fatal - and in two instances where I saw it performed there was unquestionably no occasion for disarticulating the head of the bone at all - In one case the head, neck, & Trachanta of the bone were uninjured, and in the

other not only were the head, neck, and Trachanta uninjured but more than two inches of the shaft of the bone below the Trachanta also - Latterly excision has replaced amputation at the hip joint, and the result of the six cases in which it has been tried was very satisfactory - as they all lived from a month to six weeks after the operation, and one has been sent to England as an Invalid - whereas in Amputation they seldom survived as many hours as they did days in the cases of excision

Beyond the number of Wounded of all kinds I have found it impossible to obtain any correct data as to their position from Regiments and D. Menzies, the Principal Medical Officer at Scutari, only accounts for 1148 British, & 189 Russian Wounded which he classes under the following heads

	Officers	Men
Fractures of the upper Extremities	1	42
Lower do	2	40
Wounds of the Upper Extremities	9	246
do of the Lower do	15	490
do of the Head Face & Neck	1	79
do of the Neck	3	14
do of the back & buttocks	2	21
do of the Chest	2	39
do of the Abdomen	1	20
do of the Groin	0	16
do of the Testicles	0	7
Miscellaneous Wounds	2	8
Amputations of the upper Extremity	1	29
do of the Lower	1	46
	40	1108

The following are the numbers returned by the Regiments at the time

Officers

Officers Men	Killed	Regiments	Wounded		Total
			Slight	Severe	
	21	19	36	34	89
	316	349	709	629	1687
					1776

It is almost impossible to reconcile these differences, nor - but if the men who died of their Wounds on the passage down, and those ^{on shore} ~~wounded~~ ^{of too trifling a character, to be sent away,} be taken into account, as shall arrive pretty near the truth - We know that from the arrival of the Army on the Coast of the Simsa on the 14th of September, to the 30th of September 1854 - 104 Officers, 16030 men either Sick, or Wounded, were sent down to Scutari, and of these 5 Officers, and 340 men died on the passage, but what number of them was from Wounds, and what number from disease, the records kept by the Medical Officers on board the different Ships do not enable me to state, but looking at the mortality on board the different Ships I should estimate the deaths from Wounds at between 90 and 100 - and place the remainder to the account of Cholera, which prevailed in the Army to a considerable extent from the time it landed in the Crimea to the end of the war - At Alma before the Army moved on it began to exhibit great malignancy, and several Officers were attacked and perished - Amongst the number that fell victims on this occasion were Brigadier Genl. Eyre, Commanding Royal Engineers, Major Genl. Stoddart, Dr. Mitchell, and a very talented Civil Engineer from Edinburgh the name of Mr. Keizer who had joined the Highland Division at Varna as a Volunteer - Numbers were taken ill, I myself was seized with faintness, and sickness on the evening of the 22nd, which were followed by purging, that continued until my arrival at Balaklava, when it was arrested by a powerful opiate - My friend Dr. Dumbuck insisted on my taking

The night before our arrival at Balaklava, the Head Quarters outstripped its Luggage and we had to bivouac - at the Traita bridge without shelter of any kind, and with but a scant supply of food, casually obtained - After the night's exposure I felt seriously unwell - and had not Dr. Dumbuck insisted on my taking Medicine it is more than probable that an attack of Cholera, in an aggravated form, would have been the result, for I was evidently labouring under the premonitory symptoms of the disease, which was very prevalent and fatal in Balaklava at that time

On the morning of the 23rd September the Allied Army marched from the Alma to the Katikka - a beautiful Valley full of Gardens, Vineyards, and Orchards, and there it halted for the night; the following morning it moved on to the Balbeck having 100 men in all stages of Cholera, ^{to} ~~go~~ down to the few benches by Dr. Dumbuck and myself in any way we could - The scene was most distressing - there were we nearly helpless - begging and entreating the Commissariat Officers to unload a certain portion of their scanty supply of carts to carry off the poor wretches, who were deposited by the way side in a dying state, without the means of tracing out who they were, or to what Regiment they belonged, as some of them had nothing but a blanket and checked shirt - and others, to whom we had also to see the last offices of humanity paid by having them covered over with earth in a pit by the way side, were only recognised by the names written on the inside of the waist-band of their Trowsers, which I directed to be cut out, and sent to their Regiments

At the Balbeck on the morning of the 25th the sick list had risen to 200, without any increased facility of transport - and while puzzled and perplexed how to meet this mass of misery and disease - An Officer of the Quarter Master General's Staff rode up, and said - Ah! You

See the advantage of marching without tents or baggage, for it was then known that the Army was to make a flank movement that day, had we been encumbered with baggage we could not have done this - I used my influence to get the tents and baggage sent on board ship again - Did you - Sir - and what do you suppose will be the result? - O - I suppose a little sickness - Yes not a little - Yesterday Dr. Dumbreck and I with difficulty got 100 put on board ship - today there are 200 and we do not know what to do with them; and to-morrow I have no doubt there will be 4 or 500 at least, & how long do you calculate the Army will last at that rate - That any one should boast of having used his influence to accomplish what nothing but the most dire necessity should ever induce a General to resort to is one of the wonders of modern arrangements for an Army in the field - A wanton and wilful tempting of Providence, an experiment made in ignorance it is to be hoped, of how far the human Constitution could resist the effects of climate under the most trying and adverse circumstances - Marching all day in a hot sun, and sleeping on the bare ground drenched with heavy dew, and exposed to the chilly air of night - Such was the fate, and such the arrangements for an Army that had been decimated by Cholera before it took the field, and in the ranks of which the fearful disease flourished to an alarming extent -

On the 25th the Army made a flank March by way of Mr. King's farm to the Rabbit bridge a distance of 16 or 15 miles - and the number of men who were compelled to fall out from exhaustion was quite remarkable - At the Mr. King's farm the advance guard fell in with the rear of Menchisoff's column, which was moving into the interior, and captured some of its baggage -

On the 26th the Palaklava was taken possession of after a mere show of resistance - and I seized on a building in the town that had been used as an hospital, and another that had been a Military school, and here the sick were collected, which before the end of the month amounted to 790 - & out of that number 100 died of Cholera -

I see by a Return that was made about the time that between the landing of the Army on the 14th Sept, and the end of the month - 101 Officers, & 3589 men were attacked with disease of whom 13 Officers, & 354 Men died, 21 Officers, & 326 men were killed - 4 Officers, & 16 Men are stated to have died of their wounds; 18 Officers & 1672 are returned as having been wounded -

I annex an abstract of the Return made out by Divisions which may not be uninteresting
signed J. Hall
Joseph Geny Hoople.

Meteorological Observations
for the week

made at the Castle Hosp^l Bratislava
ended 16th July 1856

Date	Baromet ^r (correct)	Thermometers						Mean temp ^r - dew	Daily Range	Wind point
		Air	Shade	Wet bulb	Dry bulb	Wet bulb - 54° - 54°	Wet bulb - 54° - 54°			
July 10	29.675	38.00	58	57.25	35.50	41.00	33.00	37.00	8.00	32.57
" 11	29.865	41.50	-	47.25	45.25	49.00	31.00	40.00	15.00	45.10
" 12	29.280	37.00	-	37.00	48.50	43.00	40.00	44.50	15.00	47.00
" 13	29.025	39.25	-	38.25	36.25	41.50	32.00	39.75	9.50	28.92
" 14	29.455	47.25	-	46.75	46.50	49.00	37.00	43.00	12.00	62.02
" 15	29.585	42.50	-	42.00	37.50	44.00	32.00	38.00	12.00	32.10
" 16	29.330	47.50	-	46.50	45.50	47.50	43.00	45.25	4.50	44.40
								40.71		

The highest reading of the
lowest 29.28 on the 12th - the latter with strong
to 29.65 on the 13th with strong wind from
mean temperature of the week 40.93 Range of
between the highest reading diff. 53 in the
cloudy.

Baromet ^r alt. 1000	Wind	Sky	Rain	Prevailing Diseases						
				Fevers	Measles	Typhoid	Cholera	Dysentery	Diarrhoea	Other
2860	N. Breeze	-	-	410	158	62	-	418	131	1101
2932	S.W. Cloudy	-	-	404	153	41	-	422	132	1097
2901	S.W. Cloudy	-	-	407	154	42	-	414	129	1115
2918	S. Cloudy	-	-	420	162	46	1	412	128	1117
2985	S.W. Cloudy	-	-	415	158	44	1	426	123	1121
2908	S.W. Cloudy	-	-	411	148	41	1	437	123	1113
2932	S.W. Cloudy	-	-	417	150	35	-	433	118	1088

Barometer was 29.72 on the 16th and the
wind from S.W. at night. The reading rose
the north mean reading for the week 29.510 -
temperatures for the week 22° being the difference
12th and the lowest diff. 31° on 11th weather generally
(calm)

J. P. Matichus
at St. C.

Meteorological Observations
for the week

made at the Basile Hospital Station
ended 23rd Feb'y 1836.

Date	Baromet.	Air	Thermometers					Mean	Daily Range
			Shade	Dry Bulb	Wet Bulb	Eight deg. up	Lowest Temp.		
Feb'y 17	29.460	45.00	-	62.00	60.00	47.00	57.00	42.00	10.0
" 18	29.580	27.00	-	26.00	25.00	38.00	26.00	32.00	12.0
" 19	29.740	21.25	45.00	20.50	20.25	22.00	11.50	16.75	10.5
" 20	29.88	32.50	53.00	30.75	27.00	35.00	15.00	25.00	20.0
" 21	29.650	45.25	-	43.75	39.50	50.00	27.00	38.50	23.0
" 22	29.410	61.00	62.00	59.50	51.00	67.00	39.50	53.25	27.5
" 23	29.100	57.75	52.00	51.50	48.00	53.00	50.00	51.50	3.0

The highest reading
it sunk to the lowest reading vizt. 27.02 in
for the week 29.585 - mean temperature
between the highest reading vizt. 67 on the 22nd
on the 11th to the extent of 0.025 of an inch

Date	Degree Fahrenheit	Wind	Sky	Rain inches	Prevailing Winds						
					North	South	East	West	North West	South West	
17	57.60	S.E.	Cloudy	-	428	154	38	-	426	117	117
" 18	54.50	N	S	0.025	431	152	37	-	422	122	1060
" 19	56.75	N	Clear	-	457	150	37	-	455	125	1102
" 20	54.85	N	Cloudy	-	437	153	35	-	447	130	1126
" 21	54.62	S.E.	Cloudy	-	442	152	44	-	461	134	1099
" 22	55.00	S.E.	Clear	-	449	146	34	-	467	150	1107
" 23	55.00	S.E.	Clear	-	440	133	32	-	440	133	1055

of the Barometer was 29.83 on 20th from which
the 23rd with strong wind from S. & S.E. mean
of the week 57.00 - range 53.50 being the difference
and the lowest vizt. 48.50 on the 19th - snow fell
when melted -

(Signed) J. P. Mathew
d. d. 26.

Meteorological Observations
for the week

Date	Baromet.	Wind	Thermometers					Mean	Daily Range
			Day	Night	Wet Bulb	Wet Bulb	Wet Bulb		
Feb 25	29.350	50.00	-	37.00	35.00	38.00	35.00	36.50	3.00
" 26	29.375	36.75	74	35.50	32.50	40.00	28.00	34.00	12.00
" 26	29.600	37.50	50	35.75	32.75	43.00	26.50	34.75	16.50
" 27	29.465	37.00	"	35.00	33.00	40.00	26.00	35.00	18.00
" 28	29.575	36.00	98	33.40	30.75	40.00	27.00	35.50	17.00
" 29	29.650	35.25	48	33.65	30.65	37.50	27.00	32.25	10.50
March 1	29.660	42.50	-	42.60	40.65	47.00	33.00	40.00	14.00
								35.43	

The highest reading of the
on 24th. Mean for the week 29.555. Mean
21st being the difference between the highest
on the 27th. Shows to the extent of .652 of

made at the Castle Hosp. Balaclava
ended 1st March 1856.

Baromet.	Therm.	Wind	Sky	Sun	Prevailing Winds						
					Force	Direction	Force	Direction	Force	Direction	
32.00	.839	N.	Cloudy	-	136	126	32	"	458	123	1073
27.55	.785	N.	Clear	-	139	124	34	"	450	116	1080
27.60	.765	N.E.S	Clear	220	149	114	36	"	455	110	1086
32.40	.916	S.	Cloudy	170	458	121	32	"	429	102	1132
24.58	.743	N.W.S	Clear	170	168	127	32	"	476	102	1105
26.00	.749	N.	Clear	-	171	128	29	"	493	104	1105
37.70	.873	S.W.	Cloudy	-	110	117	25	"	443	135	1024

Barometer was 29.67 on the 1st. Lowest 29.33
Temperature of the week 35.43. Range of temperature
reading vizt 47 on the 1st. and the lowest vizt 26
an inch when melted fell on 26th 47th.

(Signed) J.P. Matthews
Surgeon -

Meteorological Observations
for the week

made at the Castle Hospital, Balaklava,
ended 8 March 1856.

Date	Bar	Thermometers						Daily Range		
		Surf	6ft	Highst	Lowst	Mean				
(Time)				Temp	Temp	Temp				
March 2	29.610	42.75	70.00	60.75	58.50	49.00	31.00	40.00	11.00	
" 3 rd	29.200	42.00	-	41.50	39.75	43.50	53.00	38.25	40.50	10.50
" 4 th	29.070	38.00	-	33.75	30.65	46.00	32.00	39.00	44.00	14.00
" 5 th	29.330	24.00	-	21.50	21.50	24.00	11.00	17.50	13.00	13.00
" 6 th	29.475	39.50	-	39.40	37.40	44.00	20.00	32.00	24.00	24.00
" 7 th	29.240	25.00	-	24.25	23.75	25.50	24.00	24.75	1.50	1.50
" 8 th	29.020	23.25	-	21.25	20.50	24.00	17.75	21.75	5.20	5.20
								35.40		

The highest reading of the
29.09 on the 1st. Mean for the week 29.329. Mean
-at least 3° being the difference between the
high 11 on the 5th. Water fell to the extent of 1.826
partly a heavy fall of snow on the night of 4th
with strong breezes on 5th, 6th, 7th & 8th.

Compass	Direction	Force	Cloud	Sky	Rain	Precipitating Disease						
						Smallpox	Scarlet	Dysentery	Cholera	Typhoid	Measles	Whooping
55.92	SE	N.	Clear	-	416	103	27	-	445	135	1036	
37.34	SE	SW	Cloudy	.013	423	107	28	-	430	126	1056	
25.47	78	N.	Clear	.064	432	108	28	-	460	144	1114	
21.50	1.000	N.	Cloudy	.897	457	102	31	-	468	143	1050	
30.25	838	SW	Cloudy	.629	472	111	30	-	571	147	1059	
20.82	883	N.	Cloudy	.059	484	113	31	-	527	104	1056	
14.87	798	N.	Cloudy	-	489	118	31	-	521	124	1039	

Barometer was 29.68 on the 8th and the lowest
temperature of the week 30.46, and range of tempera-
-ture highest reading 49 on the 2nd and the lowest
-inches as above noted, being partly rain,
4 on the 5th, snow and rain on 6th. Snow on 7th.

Signed J. P. Mathews
Staff Surgeon

- * Rain
- ° Fahrenheit over mean 529 temperature
- ° Barometer wind at night
- x All times, all rain and
- ° Snow - 0.9 - 1.0

Meteorological Observations
for the week

Made at the Castle Hospital, Dublin
index 1st March 1876

Date	Baromet.	Wind	Thermometers					Barom. at noon
			dry bulb	wet bulb	at 5 p.m.	at 10 p.m.	mean	
March 9 th	29.525	W	60.00	56.25	56.00	56.00	56.00	
" 10 th	29.570	W	62.25	58.50	58.75	58.50	58.50	
" 11 th	29.510	W	66.50	64.50	64.75	64.00	64.50	
" 12 th	29.730	W	68.00	66.00	66.00	66.00	66.00	
" 13 th	29.665	W	67.00	65.75	65.00	64.00	64.50	
" 14 th	29.770	W	73.50	71.62	71.00	70.50	70.50	
" 15 th	29.935	W	79.00	75.75	75.00	74.00	74.50	
							34.31	

The highest reading of the thermometer was 79.00 on the 15th. The lowest reading was 56.00 on the 9th and 10th. Mean for the week 64.88. The difference between the highest and lowest being 23.00. Strong wind from N. amount of snow on the 14th.

Date	Baromet.	Wind	Sky	Moon	Prevailing Diseases						
					W	C	F	A	M	N	J
9 th	29.525	N	Clear	-	414	121	28	-	581	111	1151
10 th	29.570	N	Cloudy	-	492	127	32	-	579	128	1088
11 th	29.510	S.W.	S	-	489	111	30	-	570	108	1035
12 th	29.730	S.W.	S	-	458	109	30	-	516	109	1178
13 th	29.665	S.E.	Storm	-	452	105	27	-	519	104	1080
14 th	29.770	N	Cloudy	1009	471	100	32	-	480	103	1095
15 th	29.935	N	Clear	1000	459	103	36	-	502	107	1076

Baromet. was 29.94 on the 15th. The lowest was 29.51 on the 11th. Mean temperature of the week 64.88. The highest reading was 79.00 on the 15th and the lowest on the 9th and 10th 56.00. On the 14th a small amount of snow.

(Signed) J. P. Martin
Staff Surgeon.

Meteorological Observations
for the week ended

made at the Castle Hosp^l Balaclava
22^d March 1856

Date	Baromet ^r (inches)	Thermometers							Daily Range	Compu ^t Sum
		Air	Shad ^d	Wet Bulb	Wet Bulb Winds ^g	Highest Wet Bulb	Lowest Wet Bulb	Mean Wet Bulb		
March 16	29.890	36.00	60.00	34.88	32.40	34.00	21.00	17.50	13.00	28.57
" 17	29.700	26.25	58.00	24.75	23.00	29.00	12.00	20.50	17.00	13.12
" 18	29.960	34.00	58.00	32.50	31.00	36.00	15.00	25.50	21.50	29.00
" 19	29.780	37.50	75.00	36.25	33.25	40.00	11.00	28.50	29.00	28.75
" 20	29.450	34.75	56.00	32.75	31.00	39.00	21.00	25.00	18.00	28.50
" 21	29.510	38.00	58.00	36.25	30.25	46.00	26.00	36.00	20.00	21.00
" 22	29.640	47.00	58.00	44.25	40.00	49.00	29.00	39.00	20.00	33.90
										28.43

The highest reading
lowest 29.454 on the 20th. Mean for the week
range of temperature 38° being the difference
and lowest 29.11 on the 19th. Strong breeze from
home on the 19th when the wind was southerly

Degree of Humidity 100	Direction				Barometric Pressure						
	Wind	Weg	Weg	Weg	Weg	Weg	Weg	Weg	Weg	Weg	Weg
.973	S.	Weg	-	-	473	101	57	-	522	113	1110
.683	S.	Clear	-	-	471	106	59	-	522	111	1112
.950	S.	So	-	-	483	112	57	-	529	115	1154
.777	S.W.	So	-	-	495	106	41	-	559	119	1148
.882	S.	Cloudy	-	-	484	104	60	-	568	118	1101
.583	S.	Weg	-	-	470	108	59	1	577	116	1122
.676	S.W.	Clear	-	-	458	105	59	1	569	115	1118

of the barometer was 29.96 on the 18th and the
29.73. Mean temperature of the week 28.41, and
between the highest reading 49 on the 22^d
the week throughout the week, except for a few
hours generally fine & clear.

(Signed) L. P. Mathews
Staff Surgeon.

Meteorological Observations
for the week

made at the Castle Hospital, Bielefeld
ended 29 March 1856

Date	Thermometer										Barom.	Wind	Sky	Rain	Prevailing Diseases						
	Baromet.	Air	Shade	Wet bulb	Dry bulb	High. temp.	Low. temp.	Mean temp.	Daily range	Low point					Smallpox	Measles	Croup	Diphtheria	Scarlatina	Whooping Cough	Other
March 23	29.525	45.50	49.00	41.75	38.00	42.00	28.00	50.00	24.00	32.50	29.676	S.W.	clear		442	106	39	1	579	113	1124
" 24	29.270	46.00	75.00	62.00	55.00	46.00	27.00	57.00	17.00	33.10	29.709	S.W.	clear		422	104	39	1	565	115	1079
" 25	29.385	39.00	64.00	56.00	52.00	41.00	42.00	56.00	9.00	27.25	29.738	N.W.	clouds		430	104	39	1	550	114	1073
" 26	29.480	47.00	64.00	67.00	60.00	51.00	42.00	41.00	14.00	35.40	29.719	S.W.	clear	0.01	423	100	38	1	568	110	1076
" 27	29.365	26.75	48.00	25.00	34.00	24.00	24.00	26.00	4.00	14.00	29.658	N.	clear		432	103	44	1	526	90	1131
" 28	29.530	32.20	62.00	54.00	57.00	54.00	17.00	27.00	21.00	19.00	29.678	S.W.	clear		459	98	26	1	562	95	1083
" 29	29.325	60.50	46.00	59.00	36.00	47.00	21.00	34.00	26.00	31.95	29.710	S.E.	clear		463	85	21	1	530	88	1065
								34.71													

The highest reading of the
29.30 on the 25th, & 29th mean for the week 29.396
35° being the difference between the highest
and lowest generally fine strong breeze from N.W.
offshore from the north on the 27th. A small

Barometer was 29.53 on the 23rd & 28th and the lowest
Mean temperature of the week 34.71 and range
reading 17° 52 on the 23rd. Lowest 17 on the 27th
on 25th and high wind with a very minute quantity
amount of rain on the night of 26th.

(Signed) J. R. Matthews
L. C. S. C.

Meteorological Observations
for the week

made at the Castle Hospital, Balasore
ended 5 April 1856

Date	Thermometer								Mean	Temp.
	Baromet.	Air	Shade	By Wet Bulb	Wet Bulb	Wet Bulb	Wet Bulb	Wet Bulb		
March 30 th	29.220	42.00	41.00	39.75	43.00	47.00	40.00	5.00	38.25	
" 31 st	29.350	46.00	42.00	39.75	52.00	42.00	26.00	34.00	16.00	
April 1 st	29.525	35.25	39.00	36.00	31.40	36.00	29.00	32.00	7.00	
" 2 nd	29.740	33.50	40.00	32.25	30.00	30.00	15.00	21.00	26.00	
" 3 rd	29.660	32.00	31.00	28.60	26.00	21.00	29.00	17.00	24.10	
" 4 th	29.470	26.00	47.00	26.00	24.20	36.00	16.00	26.00	20.00	
" 5 th	29.710	65.50	65.00	64.25	41.00	32.00	27.00	35.00	23.00	

The highest reading of the Barometer was 29.525 on 1st April. Mean for the week 29.514. Mean temperature 34 being the difference between the highest & the lowest. Weather generally cloudy 2nd 3rd 4th 5th fine - a very smart squall on 4th & 5th during storm. On the 2nd a heavy heavy fall of rain, the wind shifting from South to North, and

Direction	Force	Wind	Sky	Rain	Prevailing Diseases							
					Meas.	Scar.	Whoop.	Diarr.	Colic.	Chol.	Febr.	Smallp.
944	40	Cloudy	140	435	79	22	1	512	93	997		
789	40	do	424	74	21	1	570	85	1011			
778	40	do	448	77	21	1	543	100	1011			
889	34.5	do	417	62	20	1	531	99	978			
787	30	Cloudy	416	63	21	1	519	99	979			
668	40	do	411	68	22	1	537	105	978			
783	44.5	do	424	71	25	1	570	110	1001			

was 29.78 on 2nd April & the lowest 29.20 on the 3rd of the month. 33.07 and range for the week reading 34 on the 1st & the lowest 24.10 on the 3rd. Heavy breeze from the north at night with some rain on 4th & 5th strong wind from the north at night.

(Signed) J. S. Mathew
S. Surgeon

Observations on the Siege of the place for Decr 1854

As the day of the September quarter, it was noticed that the allied Army had captured Balaklava on the 24th instant, and taken up its position on the elevated plateau overlooking the town, harbour, and southern defences of Sebastopol, and made immediate preparation for commencing a siege of the place in due form - The French saw the line of attack from the morning on the left to the highest point of the cause on the right passing in front of the Town, the Quarantine Fort - the Eastern Bastion - Bastion du Mah, and the Garden battery, with their connecting defences - The English line commenced where above there of the French ended, and extended as far as the middle cause - having the Creek battery, the flanking piece of the Garden battery - the Barracks battery - the Malakoff tower, with their connecting defences in their immediate front, and the whole Russian fleet moored in the harbour - Behind the Redoubt were the Barracks, docks, & Dock yard, - and between it, & the Malakoff, but covered by both was the populous suburb of the Carabastovise -

The extent of these lines could not be less, should they then from 5 to 6 miles, and the allied Army was encamped from Simonsich to Inberman a distance of not less than 9 miles - The ground occupied by the English Army extended from the heights of Inberman on the right to the highest point of the cause on the left - It was elevated, dry, and had a southern aspect, the supply quarters were ample, and in a sanitary point of view nothing could be urged against the locality.

at the' it subsequently became the theatre ground
Lickup, malaria, and misery from other causes -

The British divisions were encamped in the
following order -

The 2nd Division on the S.W. slope of the
Inderman heights

The Light Division on the left of the 2nd,
extending to the Warrenoff road -

The 1st Division to the rear between the
2nd and Light Divisions

The 3rd and 4th Divisions in an
extension of the line to the left of the Warrenoff road
extending to the pigst house farms, upon
higher ground than any other part of the position, &
directly overlooking the Sadou and Dardaryard -

The ground where the Camps, & the
shed was protected in part by the crest of the S.W.
plateau from which the ground sloped down to the
harbour, and was intersected by deep ravines
running in the same direction, the natural drainage
of the higher ground -

About half a mile in front of the encamp-
ment the first parallel of attack was run, and
barricades, the 2nd gun or Sailer's, and Chapman's, or
Green Hill batteries were formed, which were
formed such conspicuous parts in the siege
operations, but as it is not my province to
narrate these, but to comment on the medical
occurrences of the period, we must revert to
Balaklava where we left the limited hospital
accommodation overcrowded with the sick
of the whole Army, which were sent down there
from every quarter, and as a large proportion of the

patients were laboring under Cholera the mortality was
very considerable - I think out of 990 patients admitted
between the 26 September, when the hospitals were first opened
and the 27 of October 1854, and 118 were transferred
to the Hydrophobic Steamship -

On the arrival of the Army at Balaklava as
I judged as strongly as I could to send England, the Commis-
sioner in Chief of the Army, the absolute necessity there was
for the men being supplied with tents as speedily as possible,
after they took up their position on the elevated
plateau in front of Sebastopol, as the nights were becom-
ing too cold, and the snow too heavy for them to
behave longer in the open air without the great
imminent risk - The military authorities ^{however} did not
appear to be impressed with the same view of the
importance of the measure, and when Lord Proctor
on the 12th of October, on an official visit to the hospitals
there, notwithstanding having done, and believing the tents
were not issued until nearly a week after wards -

The weather however continued fine
and after the tents were issued a considerable
abatement of disease took place, and notwithstanding
the increased labor, and duty imposed on the
men by the siege operations which had commenced -
October proved one of the healthiest months of the
Season -

In the 11th - twelve ambulance Waggon
arrived from Vienna, bringing 16 marquees of one kind
or another, both of which were distributed by Dr. Drummond
to the Medical Officers in charge of the several
Divisions.

So long as the weather continued
fine, and the roads good the 12 Waggon were
found amply sufficient to relieve the hospital
tents

only in part by transporting the sick to Dalahlan
the part either into the general Hospital there, or a
board ship to go to Sauter, and in this way
about 1550 sick, and wounded were shipped
off in the course of October, for the Hospital acc-
ommodation at Dalahlan was found quite
inadequate for the reception of the number of sick
that presented, and by over crowding sick
of another kind was run -

Soon after the arrival of the Army
at Dalahlan advantage was taken of the
"John W. Mason" Store Ship being in Port
to land such portions of Hospital Equipment
as were necessary for the Hospital establishment;
but on the 26th of October, the day after the battle
of Dalahlan, an officer of the Quarter Master
General's Department went down and ordered
all the Sick to be immediately embarked, &
here commenced the first of our serious
troubles - Even before this the Commander
in Chief had censured the whole Medical
Department in general orders, for some delay
in embarking sick one day, owing to an
omission in the delivery of a message of the
Principal Medical Officer, at Sauter, to the Senior
Medical Officer at Dalahlan - His Lordship
quite forgetting that the duty of providing boats
for the embarkation of troops of every description,
was the province of the Quarter Master General's
Department, and not that of the Medical Department,
and even had it been the duty of the Medical
Department it was as unjust, as it was

unreasonable to censure a whole department for
the negligence of a single individual - But his Lordship
was desirous to feel the embarrassment of his position
and took this opportunity of getting his anger in
general orders, on the receipts Medical Department,
hoping, I suppose, as actually proved to be the case after-
wards, that popular outcry would be raised against
it, and that the Doctors would be made the
scape goats for the difficulties and mismanagement
of the whole Army - at Sauter when the board of
Hospital was so loudly complained of, & bitterly
commented on in the public prints, he never
interposed his protesting legs, he no one knew better
than he did that the difficulty was some general
arrangement on the contrary he left us to our fate -
and the Naval authorities found fault because ships were
not ready for the reception of 2000 wounded - whose
duty was it to provide them should he know, and
who selected the two Steamers that ^{were} fitted for Hospital
Ships - two of the most inconvenient, and worst
adapted for the purpose in the whole fleet -

at a later period Lord Selkirk issued another
Equally violent, and unjust philippic in general
orders against the Department, in the case of
the Iron Steamer, which had been damaged
in the storm of the 14th Oct^r, and about the 18th
she was fitted off for the reception of sick - Three
Medical Officers were sent on board, and an
ample supply of medical comforts provided for
such a voyage; and she was reported to me
to be complete, and so I considered her fit
with the undermounted stores for a voyage of
thirty six hours -

and subject of discussion many fine sick were embarked
for S. Martin. When the steamer was fitted up there was a
deficiency of bed pans in store, and only four were put
on board, but this was remedied afterwards by adding
six more to the number. The quantity of rice that was
originally onboard had nearly run out, from the length
of time sick had been on board, but this a difficulty of
easy remedy as there was plenty on shore in the
commensurate store, and indeed had been obtained
by asking for - These I think were all the defects we
found. But the matter had become public. The Times
Correspondent, and Mr. Augustus
Stephens, M.P. were in Balaklava trying out
the handling of the land, and the Commander
in chief decided that a Court of inquiry
should be assembled to investigate the matter -
and one was appointed composed entirely
of military officers, the part of the subject to be
inquired into was purely medical - The Court
took evidence, and amongst the rest examined
Dr. Lane on the 2^d of officers of Balaklava
but did not allow him to hear the evidence
of any one else - and yet in their report
they censured him grossly, for it was
made the foundation of the general order that
was issued against him, tho' he had neither
been arraigned, nor could he obtain a copy
of the evidence on which the Court had formed
their opinion; but as he was accused of a
requisite to humanity - all previous to his
character, he ought to have been brought to a
Court martial if his conduct merited so severe
a censure as the one which was passed on
him in general orders - But he was accused

of he knew not what, as he had no idea that his
conduct was the subject of inquiry - and the pro-
ceedings of the Court were kept equally secret
from him - This maybe was martial, but it is
not equity - The Court found what has been
before noticed, and in addition they discovered
that when the wind was in a particular quarter
the coppers wanted not drawn, which happened in
the case the day the Court met, and one of the
parties just some imperfectly cooked peas under
pilot for the Commander in chief's satisfaction -

In the general order which was issued his lordship
commented on the paucity of orderlies on board -
tho' the number was in accordance with his own
written order issued thro' the adjutant general of the
Army - He also remarked on the paucity of medical
officers altho' there had been put on board, tho' doubt
there were sufficient, and because for one day two out
of the three had been off duty - it was argued as if
they did not fight, and it was construed almost
into a crime that the one who was at his duty
was not plonger standing in the stern than nine
months, without any reference to his medical
qualifications, which, of course, the Court was not
competent to give an opinion on, so they con-
sidered themselves to standing in the service, as if
that conferred professional knowledge!

Perhaps had a Court of inquiry, but on the 2^d
of the President or the Committee of the members
no money deficiencies, and short comings would
have been found in them, as were discovered
on board the "Horn" steamer - say this distinctly
for at that time I know the officers paid very little
attention either to the wants, or comforts of them -

all the wounded either our rank were collected and dyed that morning, but as considerable alarm existed regarding our position they were shipped off to shelter as speedily as possible for further treatment -

On the 26 a sortie was made on the right flank position at Inkerman, by a body of 6000 men, which was gallantly repulsed by Sir De la Rey's forces with the 2nd Division, with a loss of 11 men killed, and 7 officers and 85 men wounded, part of them of a serious character and time were all taken care of at once, as well as several English wounded that had been left desparately wounded on the field - The enemy having parted with 6000 men, as Sir De la Rey predicted, soon tried it with 60,000, and on the morning of the 5th November, having surprised the fort, one of the most desperate fights on record ensued. It had rained in the night, and the morning was dark & foggy, with a drizzling rain falling, the fog was, who had ~~been~~ ^{been} ~~annihilated~~, but the sound of their, it is said, were heard on the road leading out of ~~the~~ ^{the} ~~camp~~ ^{camp} ~~in the course of the night but disregarded,~~ ^{been} ~~collecting his masses on the course of the night,~~ ^{and} ~~surrounded and surprised the entire garrison,~~ ^{and} ~~and was nearly into the position before any alarm~~ ^{was} ~~was given.~~ ^{given.} The regiment then turned out in confusion, and formed up in haste to oppose the storming ~~of~~ ^{of} ~~many of them having been scattered from their~~ ^{of} ~~shelters by the enemy's shot which began to fall~~ ^{of} ~~thick in the camp.~~ ^{of} ~~The men with ready presence~~ ^{of} ~~of mind pulled out the tent poles, and dropped~~ ^{of} ~~the canvas flat on the ground, but the hospital~~ ^{of} ~~baggage which were left standing in rear~~ ^{of} ~~of the encampment of the Division, were not shot~~ ^{of} ~~down until, in the course of the morning, and near~~ ^{of} ~~two o'clock occurred in them - As night~~

is supposed, in an army surprised in that manner great confusion ensued - and as no precaution had been taken to erect artificial defenses the wonder is that panic did not seize the men. Sir De la Rey's men made repeated representations, to stop the advance, but without effect, and he added, "Believe my Allies are termed De la Rey's Crabs, at least I do." I wish they may prove so eventually, but I have my doubts about the propriety of leaving us in our present condition for at that time the only obstruction there was, was the advance of some of the main Inkerman road, was a kind of half-penny hatch wall built across it; but there was another practicable made road leading direct from the Corabulencia suburb over the promontory to Inkerman right in front of our position, which does not appear to have been known to our Lieut. Genl's department, and up this road the enemy brought the great hull gun, artillery in the course of the night, and trapped it, & his columns until day light when the fight began - and had not one of the English commanders, providentially for us, perceived his orders, and marched his column of our right of the middle square which brought his divisions on the other column of their own army where they were worse than useless, instead of on his own right, as meant by his orders, which would have led him down our reserve depot of ammunition, and brought him between the Light & 2nd Divisions, and in all probability have decided the fate of the day, and perhaps, the whole campaign against us, for it is not to be imagined for a moment that men struggling for their lives against overwhelming numbers

and barely able to hold their own, would have
been surrounded, and overpowered, a heavy
column made its appearance on their rear -
after the first alarm was given the 2nd Division
was brought generally into action, as the 1st Division
could be formed up - the 1st Division, greater part
of the Light, and part of the 4th were brought forward by
force of arms, and about 8000 back in the morning
Braguet's Division of the French Army was brought to
our aid, and engaged the Enemy in conjunction
with our own men - The total number of English
Engaged did not exceed 8000 men - and there might
be 5, or 6,000 French which were opposed to dense
masses of the Enemy amounting it is said to
between 50,000, or 60,000 men - but their very numbers
made them helpless as they had not enough Artillery,
and the carnage amongst them was fearful both
from our Artillery and Minie Rifles - how in-
comparably finished field work had been done after the
fall of the 2nd battery, but it was not armed when
the action commenced, but two 18^{lb} were placed in
position in it, in the course of the morning & did particu-
lar execution on the Enemy's Columns -
But much of the fight was hand to hand, and the bayonet
was freely used on both sides - about mid day
the Enemy withdrew leaving one of the most
fearful scenes of carnage I have ever witnessed.
As the action progressed - men were taken to their
Respective Regiments, and at an early
hour of the night, Dr. Dembeck, who went round the
hospitals, reported that every one had been put up
and his wants, & hurts properly attended to, some the 2nd day,
which had to move their Hospital establishments, had accomplished
this by 10 o'clock at night, early the following morning

was made for men that had fallen in advance
among the bushes - and the Supplies wounded were brought in
also - It is computed that the Enemy must have had
between 10,000, or 12,000 just before the combat, as 10,000 of
500 dead were buried by us -

Our loss consisted of 440 Officers & 889 men killed, and 1000
Officers, & 1780 men wounded - 1 Officer & 68 men missing
in the action, or at Dintaklana, the ambulances & waggon were
actively employed under Captain Grant, and did good, efficient
and satisfactory service - as soon as the action com-
menced I dispatched Murray's clerk Fitzgerald with two
cart loads, the one to the Medical Company, and the
other with Surgical appliances - and boxes, placed on
the broadness of road near the centre of the field; but
from this precaution did not screen me from medical
misapprehension - for some one took to the French
authorities for Lint, and bandages, and it was
merely this inability to learn that led to the discovery
of the mistake, & unnecessary interference - the
application succeeded it would have been made
the groundwork of a circulating newspaper about
on the Department, or about as good foundation
as many of those that were made on it at Venter's
on the same subject - It was my ^{own} error
of apology to Lord Dalhousie smiling me from the
intendant expressing his regret at not being able to
comply with the demand - and stating that the
Commissary disposed their own property. Lord Dalhousie
did not for me to know why such an application
had been made to the French authorities without
his permission, told him it was neither made
by me, or with my consent or knowledge, nor
was there the least occasion for it, as we had
abundant stores of the kind in reserve on the

field, and that it would be desirable to find out the author, but whether any steps were taken, or not I never heard - at a subsequent period a report was made of a unit of light, and allusion and an invitation purporting to come from Miss Nightingale appeared in the Times, inviting contributions to be sent to some house in Pall Mall - low in London, and at that very time we had abundance of both in some abject street.

During the month of October the weather, tho' perceptibly colder, was fine and dry with the exception of the 4th and 5th when heavy rain fell - the dews at night were heavy - but I persons not exposed to their influence there was nothing to render the season unpleasant.

November - The first 4 days fine - on the night of the 4th it rained, and on the morning of the 5th, the day of Inverness, it was foggy with a drizzling rain during the early part of the day, but the afternoon and evening were clear, and fine - the 6th, 7th, 8th, 9th were fine, but on the 10th 11th & 12th it rained heavily and on the 14th a hurricane such as is seldom witnessed let in with heavy rain early in the morning - and all day stormy with no snow or sleet on the ground - This storm knelt all the tents and magazines in camp and the sick and well were exposed alike to its violence - my own tent was blown over soon after day broke, and all my papers blown about, & what few things I had destroyed - amongst other things one of the valuable Arab horses, brought from Egypt with me, broke his leg and I was compelled to shoot him, and myself had to take shelter in an underground cellar during the day, and was afterwards allowed to lie down in a kitchen with a black guard

for my pillow at night - The previous rain, and this day storm rendered the muddy roads impassable almost for any kind of carriage - 16th Disturbance white with snow till some 16th 17th 18th weather moderate - 20th constant and heavy rain - 21st cloudy from 23rd to 27th incessant storms of rain from the S. E. & S. W. which rendered the ground so muddy and deep with tenacious mud, and almost impassable -

December - for the first 6 or 7 days there was rain daily with snow on the distant hills - from 7th to 14th fair - 15th rain followed by deep falls of snow - 16th rain with rain - 17th fine but snow in a fearful state - 17th to 21st fair - 21st 22nd & 23rd heavy rain - with distant mountains covered with snow, and a very cold wind blowing from the S. E. - snow impassable nearly - 24th rain, sleet - 25th some frost - from 25th to end of month weather fair

During the whole of this period the men were badly sheltered, and worse clothed, in fact some of them were half naked - and nearly barefooted - they were imperfectly and scantily fed - and what rations they did get, which were good of their kind they had imperfect means of cooking for want of fuel, & camp kettles - The duty was very full, and as numbers fell sick, there being none to replace them, it augmented in proportion to those who were well, as the English had undertaken an equal extent of lines with the French, and would not for a long time admit that they could not maintain them - in fact we undertook with about 20,000 men operations that would have required 50,000 always sufficient to have carried on properly - But this fearful and injudicious trial wasted the Army to an alarming extent, and I think, at one time we could not muster more than 11- or 12,000 effective men and more than one half of these looked as if they would have been better in hospital - The men were dirty, long

rough, squalid, and miserable - and it made
ones heart ache to see the poor fellows plodding thro' the
mud up to their ankles & bring their valises up from
Palaklava a distance of 7 or 8 miles from part of the camp
situated from the nearest point - The duty at one time
was so slow that men were 12 hours on & 12 hours
out of the trenches, and very often when men came
out of the trenches they had to go down to Palaklava
to get their food - what we most felt when the men came
off duty in the trenches, they had no comforts to be had -
no change of clothes - no fire, no food properly cooked,
and no place to lie down on except the bare ground
and no covering but the wet blanket they had brought
home with them - The hospitals were not much better -
but that were brought up got wet and disease of - Typhoid,
and water proof but bottoms did not answer for the
rain that beat thro' the pine side tents, collected in pools
on them and made the men more miserable than
before they had nothing - There could not be obtained
there was no brush wood to cut and put under
the men - The pressure for discipline was so great
that even the poor fellows that we had could not be
used on account of the space each occupied, as we
could not obtain additional tents - In fact nothing
could be more wretched than the condition of the sick,
and men generally, was during this quarter -
A day or two after the battle of Palaklava, on the 25th of October,
the Cavalry Division was moved higher up the valley,
near to the Mt. de Palaklava - and shortly afterwards
it was moved onto the Plateau above, within the
line of defence now position - The site first chosen
for the camp, was in a hollow where the soil was
deep, and immediately the best weather commenced
the horses were up to their pastures & the men were in

lanterns and - Some time afterwards the heavy Brigade
was moved to the slope of the hill above its first camp,
and the Light Brigade near to Suberman -

The Cavalry were soon in nearly as great discomfort in
their new encampment as they had been in their old -
no attempt was made to pave the tracks of the horses, &
the soft ground was soon broken into a puddle,
in which the men waded about half the day, and
indifferently clothed, and subjected to a great extent
was saved the case amongst them and they lost accounts
of men - Like the rest of the Army there suffered chiefly
from affections of the stomach & bowels, and Cholera, &
of many men - Finding that this misery was more greater
in proportion than that great quantity of the line, on
account of the horses they had to attend to as well as themselves,
and the very little experience, or idea they had of providing
for their own needs - In November on the 22nd of
November that some sheds, & stables in a village called
Karami, about a mile & a half from the camp should be taken
possession of, and converted into hospitals for the
sick of the Cavalry - These would have contained about
100 sick, who would at all events have obtained
the shelter of a roof by this means - But the Communist
made divisions had got possession of part of the sheds, for themselves,
and their animals - and when the Communist Officer in
charge of them found out that efforts were being made
to convert the sheds into hospitals for sick men, he wrote
a strong protest against it to the head of the Department,
which was forwarded by the Lord General, with an angry
strong letter from himself to the Lord General, stating
that if the sheds were turned out of the warm & dry
shelter of the buildings they would all perish - This
correspondence was forwarded to me for reply, and I remarked
that according to the doctrine of the Communist

I would appear that the doubling stood higher in the scale of Creation than man, and that its preservation was of more importance to the state than the sick soldiers - I did not get the sleds, and their occupation by the big arabs, did not save the communication cable, as they nearly all died shortly afterwards -

Application was then made for any house or enclosure there might be in Palaklawa, or Kadekai - and the houses, that were habitable at Kadekai, as well as the church were given over for the sick, & occupied by the Highland divisions - In Palaklawa the only house fit for the reception of sick was the one in possession of the English Commander in Chief - There was an unfinished building at the great hospital, which had platform and every thing ready for its completion when we took possession of Palaklawa, but I could not get anything done to it previous to our leaving the time nor could I long afterwards, altho' repeated applications were made on the subject - the question was referred to the Engineers but nothing was done, until Lord Raglan visited the hospital himself, and gave me orders when it was at once carried forward, so that all the previously alleged difficulties must have been imaginary -

An effort was made to obtain shelter for the sick by digging out subterranean but like those used by the Turks, but without success - and subsequent observation has convinced me that it was a matter of no consequence, as the French held them for their two winters and were obliged to abandon them, and the herbs were rotting under the whole winter, & lost a number of men from typhus fever -

By the "Sera" which arrived about the 15th of November tents and tents were received, but by this time the work had become nearly impossible, the snow of the port was dirty, & rapidly diminishing - and the difficulty of getting things to the front ^{in any manner} towards the end of the snow of the broken but Bonnets were received - the first landed were appropriated for the reception of sick, and a few more erected in front of the General Hospital at Palaklawa, but as there was no means of transporting them to the front except upon men's shoulders - and the duty of the men was in other ways so harassing, so that it was with the greatest reluctance that fatigue parties were applied for for the purpose - so that it was not until some time in January that they began to find their way to the front, and some troops were more energetic than others in their endeavor to get shelter for the sick - But from oversteering the wind, & the sick list was frightfully large and each man that went to hospital visited his comrades to follow, because our own operations had not replaced promptly like that of the French; but the additional duty had to be performed no matter how low the strength of the efficient men had been reduced - so that at one time more than one third of the army was in hospital, and one half of the remainder, from their appearance might, with justice, have gone there - This was the great source of all our difficulties and would have embarrassed us, had our resources been even more ample, and better organized than they were - Work of transport both for getting stores and supplies up, for removing sick from the front was severely felt - our own ambulance works were soon become more effective after the weather broke up

and rendered the sands deep - he afterwards was assisted by occasional bands of the French Ambulance, by the artillery troopers, when going down for forage, which were generously given except for their own use, & consequently in a great measure unproductive so far as the health of the men were concerned. When ordered to perform the duty they found that it was impossible for the troopers to leave camp at day break. Of course such men could not be got ready at that hour and consequently were held down in that way. The cavalry horses, not being required for military purposes, were at a later period, and after much urging employed in the transport of sick from camp to Imbrosia, but this of course, only embraced those who had sufficient strength left to sit so long on horseback, having the worst cases, those most requiring aid in descent to their fate. The agent of transport, pleased as he felt of any such service, which might happen to be in port and available for the service of sick, thus putting away our means of equipment and rendering us the best possible aid. The two steamers that had nominally been fitted up as hospital ships, the perhaps the most adapted for that purpose among in the fleet, were lost sight of, and when in December two others were, at my urgent solicitation, dispatched for that service - two of the smallest they had were chosen - I give some idea of the service it is sufficient to mention that from the time the Army landed in the Crimea to the 31 December 50 different vessels, were fitted up for the conveyance of wounded to Scutari, besides those taken, and in this way 11963 British and 337 Russians were conveyed thence, a total of 12300 - When so much difficulty was experienced in obtaining accommodation for our sick wounded, I applied to have a vessel

sailing transport called the "Pasha of the ocean", which had been disarmed in the straits of the 14 "Ebo", cleared of her truck and moved near the shore as a receiving hook - after some delay, & difficulty this was granted, but on her after accommodation was appropriated for the reception of the sick of the Marines, serving on shore - which reduced the space allotted for the Army to about 1000 convalescing. The list of the names, regiments, & number of soldiers, including the names of the vessels, the following arrangements, found

48 from England -	789 strong	probable	1000
62 from Malta -	530	do	110
9 th do	564	do	27
97 th of Devon -	967	do	22
Drift for England -	2080		
	<u>4940</u>		

89 th of Devon -	648	strong	probable	1500
7 th do	729	do	probable	700
30 th do	575	do		700
90 th do	764	do		500
71 st do	<u>1423</u>			
39 th do	<u>4132</u>			
Drift for England -	2024			
	<u>6156</u>			
add for October	3538	particulars, not given -		
Total -	<u>14634</u>	arrived during the quarter		

according to the returns out of a mean strength of 88789, 25336 were under treatment, 2577 died, and 7933 were sent away as convalescents.

During the month of October Cholera was less prevalent than it had been since its first outbreak in Bulgaria in July - but about the middle of November it broke out again with unusual violence amongst the ranks of the newly arrived regiments, and amongst the recruits who had joined the other

Regiment many of whom were feeble young
lads quite unequal to the hardships, and physical
exertions required from soldiers during a siege like
that of Sebastopol, and many of them sickened
and died, or were sent down to the hospital for
Cholera a large portion of the Cholera cases, in the
Regiment that had served the whole Campaign
occurred amongst the recruits, some troops of
whom were landed on imperforable weather,
and at unseasonable hours of the day - The
same thing happened with the 4th, and I considered
it necessary to call the adjutant general's particular
attention to the subject - The 4th Regt. landed from Malta
on the 8th Oct^r, and immediately marched up to camp
and arrived there late in the evening, no preparation
had been made for them and the men were exposed
to frost & cold until about 4 in the morn^g when their
tents arrived, and were pitched on the best ground
Cholera attacked the Regt. on the 11th - on the 16th all their
tents were blown down, and both land and sea
at the violence of the storm, & as might be expected a
great increase of sickness took place, and before the end
of the month 79 men had perished, and 44 more
died in the course of December - With the Surgeon
states that during the month of Dec^r the men of the
4th Regt. had only one entire night out of ten
in their tents -

The 9th Regt. landed from Malta on the 27th
Oct^r and was immediately marched up to camp,
and put on duty in the trenches - The weather
was cold wet and tempestuous, & Cholera broke
out on the 29th - 6 men died before the end of the month;
& 81 in the course of December out of a strength of 544 -
The Regt. had suffered much from frost at Malta in

the course of the autumn, and many men were sent
for service in the winter when only Constantinople
from the disease, and but the calculation to encounter
the hardships, and privations of their dispositions

The 82nd Regt. landed from Malta also on the
14th Oct^r and was almost immediately attacked with
Cholera - which however was ascribed to change of diet -
fatigue and exposure - 16 died before the end of the month
& 10 in December. The 97th Regt. which came from the Princes
Isles it had suffered from Cholera - landed here on the
22nd Oct^r and was soon after attacked with Cholera
and 21 men died from it before the end of the month
and 46 in Dec^r

Some of the drafts of recruits suffered even
more severely than the newly arrived Regts., and equal in-
difference was shown by the military authorities about that
time they were sent off to find their Regts. - The Surgeon of
the 23rd Regiment describes one of these scenes, where a
draft of recruits for the 10th Regt. was landed, and sent off
late in the evening to find their Regt. ^{particular}
without guide or assistance - The men wandered about
in the mud nearly all night, some found their Regt.
by other soldiers taking compassion on them & showing them
the way - others took refuge with the French - one man
was attacked with Cholera & died - some of the men
did not find their Regts. for two or three days -
In the month of December several fresh Regts. arrived
bringing an accession of strength of 4132 men -
They were all more or less sufferers from Cholera -
but about the middle of the month the disease
nearly disappeared - and was followed by
Scorbutic Diarrhea, & Dysentery - which proved
very destructive - In another the receipt for some
juice was pointed out both by Dr. Dumbuck himself
& the authorities, and on the 28th a supply was
obtained from the Army - a part of it was brought up at once

Some few days afterwards a question arose about the propriety of continuing the issue of wine, some of the Medical Officers having given it as their opinion that it was unnecessary to be given daily, the Survey pointed out in the Army and was written to by the Director Major General to state the extent of the issue already made and to give my opinion as to the propriety of its continuation, the Staff previously urged its adoption, in the strongest manner I could (but now adopt the opinion of the Surgeon, most experienced, and most judicious, Medical Officer is raised in opposition to that which is known to be efficacious in such cases by the experience of years, on an extensive scale in the Army, to this letter of the 14 Feb^r 55. from the Director General the following answer -

Dear Sir Major General

14 Feb^r 1855

I reply to your letter of this date with the honor to inform you, that, so far as my information goes, the use of wine has been attended with the most beneficial effect, where it has been regularly administered, and of my opinion, as I have already stated, that it should be given daily as a ration to the whole Army, in the proportion pointed out in General Order on the subject.

If given in that way, and combined with the use of fresh vegetables, and fresh meat, it would soon correct the tendency to scurvy, which nearly every Medical Officer complains give his Medical Reports.

The Director Genl
 Head Q^r

P. Hall
 B

Abstract of the Quarterly Return of Sick and Wounded of the Troops in the Crimea from 1st Oct. 1854 to 31st Dec.

Disease	1854					Disease	1855				
	Admitted	Discharged	Deaths	Wounded	Returned to Duty		Admitted	Discharged	Deaths	Wounded	Returned to Duty
Wet Shingles	27	25	26	18	71	Wet Shingles	2	1	3	3	26
Colic	117	124	120	100	122	Colic	2	2	1	1	2
Phurton	6	4	4	1	15	Phurton	2	2	1	1	1
Diarrhoea	2	2	2	1	1	Diarrhoea	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2	2	1	1	1
Cholera Infantum	1	1	1	1	1	Cholera Infantum	2	2	1	1	1
Scalding	1	1	1	1	1	Scalding	2	2	1	1	1
Cholera	1	1	1	1	1	Cholera	2				

As the winter advanced new classes of disease came prominently forward - Petri's epidemic, which had been comparatively few in number during the months of October & November were doubled in December both in frequency and fatality; these affections: Dysentery, & Dysentery were also doubled in frequency & fatality in December; and Cholera, the not increased in frequency, was fearful in fatality during the portion of December which it lasted, for it nearly disappeared about the middle of the month - Rheumatic affections, & night blindness anticipated were more common, and Scurvy began first to show itself as a distinct disease and 211 cases were admitted under that head during the month 136 of which occurred in December. This complaint however remitted, and brought more prominently forward during the months of January & February must doubtless have exercised a powerful influence over other affections such as Dysentery & Cholera. In October, & November the battles of Paladiana, and Inderman produced a great influx of wounded and consequent mortality, but these cases must be considered apart from the influences which were at work, & producing other forms of disease - Certain Regiments suffered more than others during the 19-20-30-41-42-46-50 & 79; & one the 13th from the number of men who died and were sent down to Sularia, became totally inefficient & it was found necessary to withdraw it from the Lines altogether, & station it on the heights of Paladiana to recruit - The detail of medical treatment I do not enter on as that is given by the officers themselves in their observations

39 Regiments left Paladiana for Sularia during the quarter with 222 Officers & 8167 Men, and of these 5 Officers, and 39 Men died on the passage - In addition to these there were 150 wounded Russians, and a small steamer called the *Leucophaea* 38 wounded making a total of 222 Officers & 8355 Men killed or wounded at Paladiana -

J. Hall
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Meteorological Observations
for the week

made at the castle Hosp. Balaklava
ended 12 April 1856.

Date	Baromet. (inches)	Thermometers							Mean	Dew	Compass
		Air	Sun	Bolt	Bolt	Self	Self	Self			
April 6	29.570	47.00	46.00	46.25	39.50	52.00	57.00	44.50	15.00	31.83	
- 7	29.575	52.00	49.00	48.00	46.25	57.00	46.00	50.50	13.00	42.77	
- 8	29.475	54.00	-	53.00	49.00	57.00	45.00	51.00	12.00	45.75	
- 9	29.395	52.25	48.00	48.50	47.75	55.00	46.00	49.50	11.00	45.33	
- 10	29.460	56.00	48.00	55.00	42.00	59.00	41.00	50.00	18.00	49.90	
- 11	29.360	70.00	46.00	68.00	46.00	71.00	46.00	63.50	15.00	48.30	
- 12	29.435	57.00	49.00	48.25	48.00	69.00	46.00	62.50	13.00	47.32	

Degree	Humidity	Wind	Rain	Ascaus Remaining						
				Wine	Oil	Oil	Oil	Oil	Oil	Oil
610	S.E. clear	-	-	431	66	22	1	559	116	892
794	S.E. do	-	-	422	63	23	1	535	114	980
782	S.E. strong	209	-	427	64	20	1	539	111	923
833	S.W. strong	-	-	433	56	21	1	479	104	968
863	S.W. strong	-	-	424	56	30	1	497	107	945
826	S.E. summt.	-	-	412	51	25	1	478	109	974
741	N.W. summt.	-	-	423	44	25	1	474	106	905

The highest reading of the Baromet. was 29.60 on the 6th & 7th and the lowest 29.36 on the 11th. Mean for the week 29.469. Mean temper. 53.4 being the difference between the highest reading & the lowest generally from 0.209 inch of rain fell on

the night of the 8th.
The range of temperature was 53.07 and range of temperature 34.71 on the 11th and the lowest 37 on the 6th.

(Signed) J. D. Matthews
2^d Staff Surgeon

Meteorological Observations
for the week

made at the Castle Hospital, Balaklava
ending 19 April 1856.

Date	Thermometers								Mean value of Range	Compu- tation
	Baromet. Air	Day	Night	Wet	Wet	Wet	Wet	Wet		
April 13 th	29.475	58.50	74.00	56.00	50.00	62.00	63.00	52.50	19.00	45.42
" 14	29.490	60.75	87.00	58.00	53.00	63.00	67.00	47.00	24.00	49.50
" 15	29.380	59.50	70.00	58.50	50.50	65.00	65.00	55.00	20.00	44.90
" 16	29.275	63.00	79.00	61.50	53.00	72.00	49.00	60.50	23.00	47.60
" 17	29.330	60.00	88.00	58.00	54.50	64.00	49.00	56.50	15.00	52.05
" 18	29.385	43.50	-	42.25	40.00	45.00	40.00	42.50	5.00	37.30
" 19	29.350	47.00	-	50.00	46.00	55.00	36.00	45.50	19.00	41.90

The highest reading of the Barometre
16th Mean for the week 29.324 - Mean temperature
the difference between the highest reading viz 72 on
June & clear rain on the night of 19th from S.E.

Superf. of Barometre 1000	Prevailing Winds									
	Wind	Sky	Wind	Force	Force	Force	Force	Force	Force	Force
.698	N	clear	-	395	49	22	1	467	98	973
.720	East by N	do	-	412	63	17	1	454	97	972
.681	S.E.	do	-	407	53	16	1	434	98	965
.616	S.W. by S	Cloudy	.0130	417	52	15	1	418	99	957
.819	S.W. by S	Cloudy	-	394	44	10	1	398	85	994
.827	N.W.	Cloudy	.002	399	41	11	1	396	95	982
.763	S.W.	Cloudy	.0221	396	41	11	1	412	97	1005

was 29.57 on the 14th and the lowest 29.26 on the
of the week 51.93 and range of temperatures 36 being
the 16th & the lowest viz 36 on 19th first half of the week

(Signed) J. P. Matthews
Staff Surgeon

Meteorological Observations
Balaklava
For the week ended

made at the Castle Hoop
26 April 1856.

Date	Baromet.	Thermometers.						Mean	Daily Range	Temp. at
		Air	Sun	Shade	Water	Wet Bulb	Wet Bulb			
April 20	29.025	66.25	66.00	65.25	61.50	68.00	64.50	4.00	55.50	
" 21	29.450	69.00	66.00	68.00	64.00	55.00	59.00	16.00	39.60	
" 22	29.525	66.00	70.00	62.75	66.50	66.00	62.00	14.00	39.87	
" 23	29.520	62.00	75.00	62.00	65.00	66.00	64.00	12.00	39.50	
" 24	29.520	65.00	90.00	53.75	69.00	61.00	65.00	28.00	65.90	
" 25	29.490	62.00	95.00	60.00	65.00	67.00	69.00	28.00	65.13	
" 26	29.490	62.25	88.00	69.50	67.00	66.00	64.50	25.00	65.00	

Temp.	Humidity	Wind	Sky	Rain	Precipitating Areas						
					Wet	Wet	Wet	Wet	Wet	Wet	Wet
69.4	N	Cloudy	0.05	37.8	41	11	1	393	99	1025	
70.8	S.W.	Cloud	0.70	35.8	35	12	1	554	91	1082	
65.7	N	Dr	-	35.7	39	8	1	576	92	1088	
68.5	S.W.	Clear	-	35.7	36	9	1	393	88	1112	
72.9	S.	Dr	-	34.0	27	7	-	352	83	1111	
58.8	Calcut	Dr	-	34.6	26	10	-	345	92	1098	
61.4	S.	Dr	-	33.0	31	10	-	333	81	1099	

The highest reading of the Barometer
for the week 29.477. Mean temperature
the difference between the lowest reading vizt. 29°
on 26th & 21st to the amount of 0.2621 of an inch.
Snow lay from the north on the 26th weather fine

was 29.54 on the 23rd & the lowest 29.30 on the 20th
of the week 46.93. Average for the week 38° being
on the 23rd. The highest vizt. 67° on the 25th. Rain fell
a small part of that which fell on the 21st was hail.
except as above stated.

(Signed) J. P. Matthews
Staff Surgeon

Meteorological Observations
for the week

made at the Castle Hosp^l Balaskava
ending 3rd May 186.

Date	Baromet ^r (mean)	Thermometers								Compu ^t	
		Air	Sun	Day bulb	Night bulb	Wet bulb	Wet bulb in shade	Wet bulb in sun	Wet bulb in sun	Range	Mean
April 27	29.695	62.00	80.00	58.50	55.25	55.00	65.00	70.00	22.00	50.17	
" 28	29.575	57.00	80.00	55.00	47.50	49.00	46.00	46.50	25.00	48.75	
" 29	29.555	54.00	80.00	52.25	40.25	45.00	42.00	42.50	21.00	48.68	
" 30	29.680	60.00	80.00	58.00	53.50	49.00	46.00	47.00	22.00	50.35	
May 1 st	29.405	56.00	75.00	55.00	47.50	43.00	45.00	42.00	18.00	48.75	
" 2 nd	29.535	61.00	70.00	55.50	47.50	46.00	42.00	42.00	24.00	47.70	
" 3 rd	29.275	64.00	"	61.50	56.50	65.00	46.00	45.50	19.00	43.00	

Degree of Humidity at 5000	Wind	Sky	Rain	Diseases Remaining						
				Croup	Whooping Cough	Diphtheria	Scarlet Fever	Measles	Other Diseases	
.724	S.S.W.	variable	"	322	32	10	"	521	79	1054
.812	S.W.	S.	"	278	32	10	"	284	77	698
.880	S.	variable	"	297	55	15	"	262	75	1099
.775	S.	Clear	"	279	27	9	"	250	76	1166
.812	S.W.	Cloudy	"	276	35	5	"	278	68	1077
.777	S.W.	S.W.	2.71	282	44	7	"	276	64	945
.755	S.S.E.	Cloudy	.521	292	29	7	"	297	66	1014

The highest reading of the Barometer
mean for the week 29.686. Mean temperature of the
difference between the lowest reading of 42 on
weather generally fine except the two last days

was 29.60 on the 28th and the lowest 29.25 on the 3rd
week 29.79 and range for the week 2nd being the
the 29th & 2nd and the highest of 69 on the 28th
of the week when 0.3692 of an inch of rain fell
(Signed) J. P. Matthews
Staff Surgeon

Meteorological Observations
for the week ended

made at the Castle Hosp. Belatona
16 May 1856.

Date	Thermometers								Daily Temp. - Mean	
	Baromet. inches	Baromet. feet	Surf. Bull.	Surf. Pole	Wind at 2 1/2	Wind at 4 1/2	Wind at 6 1/2	Wind at 8 1/2		
May 4	29.62	62.00	75.00	60.00	55.25	56.00	52.00	53.00	16.00	52.75
" 5	29.22	66.50	81.00	64.00	55.25	71.00	53.00	65.50	25.00	51.00
" 6	29.50	67.00	81.00	65.50	57.50	64.00	65.00	56.00	16.00	48.70
" 7	29.61	68.00	"	66.00	59.00	66.00	67.00	55.50	17.00	44.00
" 8	29.67	62.00	76.00	58.75	52.50	65.00	67.00	56.00	18.00	49.70
" 9	29.70	61.50	75.00	60.50	53.50	64.00	64.00	62.50	23.00	49.30
" 10	29.77	66.00	81.00	63.00	55.00	72.00	63.00	57.50	30.40	49.40

Date	Humidity at 1000	Wind	Sky	Rain	Prevalent Diseases						
					Whooping Cough	Diphtheria	Scarlet Fever	Measles	Small Pox	Typhoid Fever	Other
May 4	74.4	W.	Scarcely	-	293	22	9	-	248	65	1074
" 5	89.0	SE. 1/2 E.	Clear	-	294	31	8	-	291	64	1089
" 6	79.3	W.	Clear	-	276	23	6	-	237	66	1134
" 7	70.9	SE. 1/2 E.	B. Cloudy	0.070	302	32	9	-	275	65	998
" 8	72.5	SE. 1/2 E.	Clear	-	296	33	7	-	252	65	975
" 9	71.0	SE. 1/2 E.	Clear	-	307	36	6	-	253	68	1060
" 10	73.4	SE. 1/2 E.	Clear	-	288	39	9	-	258	65	1045

The highest reading of the Barometer
was for the week 29.77. The mean temperature
difference between the highest reading viz. 78° on
5th - a strong breeze from S.E. on morning of the

was 29.79 on the 10th and the lowest 29.20 on the 5th
of the week was 57.29 and the range 37° being the
the 5th and the lowest 27.41° on the 9th. Weather generally
S.E. 0.0710 inch. of rain on the 7th.

(Signed) J. P. Matthews,

Surgeon and Registrar General of the S. S.
The Scotchman's tent hospital was

In the first instance it was given daily, and afterwards,
Soldiers' Halls, 3 times a week, and in this way
being eradicated.

The operations of the siege were
number wounded admitted into hospital was
previous of 834 & were admitted making a total
which cannot be considered a high mortality
even in terms of the conservation

conducted languidly during the quarter, and the
Comprehensively speak 124 remained at the end of the
of 466 - of which number 48 died - or 10.3 per cent
when the generally reduced state of health of the

J. P. M.
15

Meteorological Observations
for the week ended

made at the Castle Camp, Antigua,
17 May 1856

Date	Thermometers										Temp. Dew point
	Air	Sun	Shade	Wet bulb	Wet bulb	Wet bulb	Wet bulb	Wet bulb	Wet bulb	Wet bulb	
May 11 th	29.630	65.00	55.00	62.00	58.00	52.00	47.00	63.50	53.50	50.10	
" 12 th	29.470	60.25	55.00	55.00	70.00	52.00	63.00	22.00	53.63		
" 13 th	29.395	67.00	55.00	65.00	59.00	72.00	68.00	60.00	54.00	55.60	
" 14 th	29.400	70.00	50.00	66.50	60.50	70.00	57.00	62.50	53.00	55.60	
" 15 th	29.400	61.00	58.00	69.00	57.50	70.00	50.00	62.00	16.00	56.60	
" 16 th	29.470	63.00	55.00	60.00	58.00	72.00	55.00	63.50	17.00	55.60	
" 17 th	29.275	73.50	58.00	72.50	61.00	70.00	54.00	64.00	20.00	55.25	

The highest reading of the Barometer
was 29.63 on the 11th and the lowest 29.25 on the 17th.
The mean temperature
between the highest & lowest readings on the 11th
from 2.0 on evening of 11th.

Date	Time	Wind	Rain	Revolving Scales						
				Wet bulb	Wet bulb	Wet bulb	Wet bulb	Wet bulb	Wet bulb	
May 11 th	5.00	cal. S.W. Windy	10.00	280	35	8	-	206	57	970
" 12 th	5.00	cal. S.W. Windy	11.27	281	34	7	-	195	57	1025
" 13 th	5.00	cal. S.W. Windy	-	302	35	5	-	203	59	1033
" 14 th	5.00	cal. S.W. Windy	-	292	31	6	-	203	65	1035
" 15 th	5.00	cal. S.W. Windy	20.14	290	32	5	-	206	62	1052
" 16 th	5.00	cal. S.W. Windy	-	302	27	5	-	211	60	1062
" 17 th	5.00	cal. S.W. Windy	01.01	291	31	4	-	207	70	1019

was 29.63 on the 11th and the lowest 29.25 on the 17th.
The mean temperature
between the highest & lowest readings on the 11th
from 2.0 on evening of 11th.

(Signed)
J. P. Matthews
d. S.

Meteorological Observations
for the week

made at the Civil Hospital Balaklava
ended 24 May 1856.

Barometer	Thermometer							Daily Computs
	Date (Mean)	Air	Shade	Wet Bulb	Dry Bulb	Wet Bulb	Mean	
May 1 st	29.18	66.50	77.00	64.25	59.00	69.00	62.50	13.00 55.62
" 16	29.22	64.25	"	62.25	53.75	66.00	57.50	17.00 53.07
" 20	29.22	63.25	"	61.25	56.25	70.00	57.00	19.00 52.75
" 21	29.34	66.50	84.00	65.00	63.00	64.00	64.00	19.00 50.90
" 22	29.62	65.50	82.00	63.75	58.00	68.00	66.50	23.00 54.57
" 23	29.57	65.00	74.00	62.25	58.00	67.00	67.00	20.00 57.17
" 24	29.61	64.00	76.00	64.00	58.00	71.00	66.50	25.00 58.70

The highest reading of the
on the 1st mean for the week 29.413 - mean
difference between the highest reading 73° on
17th & 21st to depth of 0.4503 of an inch. thick fog
from N.W. on the morning of 21st.

Signs of Weather	Wind	Direction	Force	Barometer						
				Time	Barometer	Barometer	Barometer	Barometer	Barometer	
750	S. E.	Variable	-	280	35	4	.	183	66	1011
969	S. W.	Variable	3334	281	27	4	.	186	63	1008
789	S. W.	Variable	"	284	31	5	.	176	63	982
804	S. W.	Variable	1169	278	34	6	.	187	58	992
750	S. W.	Clear	"	278	40	7	.	189	58	977
676	S.	Clear	"	262	26	6	.	175	57	835
595	S.	Clear	"	272	27	8	.	178	49	829

Barometer was 29.70 on the 22nd & the lowest 29.17
temperatures of the week 59.36 range 28° being the
the 24th & the lowest 45° on the 22nd. Rain on
on afternoon of 19th with S.W. wind - heavy breeze

Signed,
J. P. Marshall
Staff Surgeon.

Meteorological Observations
for the week

made at the Castle Brough, Balaklava
ended 31st May 1856

Baromet.	Thermometers							Temp. Range	Daily - bar.	Compu.
	Date	Baromet.	Bar.	Dry Bulb	Wet Bulb	Exp. Bulb	Lowest			
May 25	29.458	71.50	86.00	69.75	54.00	79.00	54.00	61.10	25.00	43.97
26	29.525	75.50	93.00	78.00	62.50	83.00	60.00	71.50	23.00	57.25
27	29.516	60.50	-	52.00	57.75	65.00	54.00	59.00	11.00	56.83
28	29.535	66.50	90.00	65.00	57.25	70.00	52.00	61.00	18.00	52.50
29	29.555	70.50	88.00	72.25	61.25	77.00	59.00	65.00	18.00	56.00
30	29.520	81.00	106.00	78.25	65.75	84.00	62.00	75.00	22.00	60.17
31	29.400	76.50	99.00	73.50	66.50	81.00	58.00	69.50	23.00	63.00

Superf. Baromet.	Wind	Sky	Rain	Prevailing Direction						
				Force	Direction	Force	Direction	Force	Direction	
2422	S.	clear	-	264	25	9	-	163	49	796
2495	SE	drizzle	-	248	27	8	-	156	48	792
2411	SE	drizzle	3.200	255	25	7	-	148	49	816
2467	SE	drizzle	-	262	21	5	-	147	47	808
2468	SE	clear	-	247	22	6	1	138	48	757
2468	SE	drizzle	-	250	29	4	1	136	48	740
2411	S	drizzle	-	244	32	6	2	130	43	719

The highest reading of thermometers
mean for the week 29.4444 - Mean temperature
the difference between the highest reading
28th. Rain fell on the 27th to the depth of 0.5253

was 29.57 on the 28th & the lowest 29.30 on the 26th
of the week 67.00 & range for the week 32nd being
out 84 on the 30th and the lowest 52 on the
1st of an inch - High breeze from S.E. on 28th & 29th.

(Signed) J.P. Matthews.
Staff Surgeon.

Meteorological Observations
for the week

Notes made at the waste Asyl, Putakawa
ended 7 June 1886

Date	Thermometers							Baromet. (alt. 1000)	Temp. point
	Baromet. (alt. 1000)	dry bulb	wet bulb	dry bulb	wet bulb	mean	Daily dew		
June 1 st	29.42	75.00	-	72.50	67.00	69.00	69.50	21.00	64.25
" 2 nd	29.67	72.00	57.00	70.00	63.00	67.50	67.50	19.00	57.25
" 3 rd	29.77	70.25	56.00	67.00	62.25	64.50	62.50	27.00	60.47
" 4 th	29.71	71.75	56.00	70.25	62.50	74.00	62.50	25.00	58.63
" 5 th	29.65	75.00	60.00	72.50	64.50	71.00	62.00	21.00	60.50
" 6 th	29.59	74.00	50.00	71.50	64.50	77.00	64.50	23.00	61.00
" 7 th	29.44	74.50	64.00	73.50	64.50	77.00	63.00	20.00	60.00

Degree	Prevailing Winds (Range)									
	Wind	Weg	Wave	Weg	Weg	Weg	Weg			
764	S	7074	-	247	31	5	2	128	44	750
704	S.W.	clear	-	253	33	6	2	125	40	751
834	S.W.	S	-	224	37	8	2	129	41	761
669	S.W.	S	-	223	35	10	2	125	47	760
678	S.W.	S	-	204	35	9	2	95	36	725
709	S.	S	-	195	36	7	2	93	40	722
669	S.W.	S	-	207	46	12	3	97	40	705

The highest reading of the
on the 1st. Mean for the week 29.609. Mean
3rd being the difference between the highest
3rd. - Misty fog throughout the whole of the day on the

Barometer was 29.77 on the 3rd & the lowest 29.40
temperature of the week 66.07 (range of temperature)
reading 84.50 on that 1st & the lowest 49 on the
1st. Weather otherwise fine & clear.

Signed, J.P. Matthews
Staff Surgeon

Meteorological Observations
for the week

made at the Castle Hospital, Balaklava,
enclosed 21st June 1856

Barometre	Thermometer				Mean		Daily	Average	Barometre	
	Barometre	dry	wet	highest	lowest	range				Barometre
Date/Time	Barometre	dry	wet	highest	lowest	range	Barometre	Date/Time		
June 29. 2.55	81.50	104.00	76.00	65.50	87.00	55.00	76.00	36.00	28.75	
16	29.558	75.25	98.00	72.25	66.00	88.00	60.00	73.00	26.00	61.50
17	29.553	76.50	90.00	74.25	68.50	86.00	60.00	72.00	24.00	66.17
18	29.555	74.00	94.00	72.75	68.75	83.00	58.00	70.00	25.00	66.12
19	29.550	78.25	98.00	74.50	67.00	81.00	59.00	70.00	22.00	63.25
20	29.620	79.75	98.00	77.00	70.00	85.00	58.00	71.00	27.00	66.25
21	29.600	79.00	110.00	78.00	68.75	85.00	61.00	73.00	24.00	63.00

The highest reading of the Barometre
Mean for the week 29.559. Mean temperature of the
difference between the highest observation viz. 87 on the
Thursday on 18th & 19th with a fall of rain on the

Degree	Humidity	Wind	Sky	Rain	Precipitation					Dew	Fog	Snow
					Wind	Thunder	Light	Heavy	Other			
576	N. S.W.	Clear	.	.	99	42	26	1	39	15	163	
713	N.E. S.W.	Clear	.	.	108	38	24	1	23	15	187	
759	S.W. S.E.	Clear	.	.	106	36	25	1	20	14	255	
785	S.W. S.E.	Cloudy	1920	Thunder	71	32	24	1	13	10	215	
697	S	Clear	.	.	67	29	13	1	15	6	180	
607	N.W. S.E.	Cloudy	.	.	78	41	21	1	15	6	191	

was 29.64 on the 20th & the lowest 29.46 on the 15th.
week 71.11 & the range of temperature 34° being the
18th and the lowest viz. 53 on the same date.
former day.

(Signed) J. P. Matthews
Staff Surgeon

Meteorological Observations
for the week

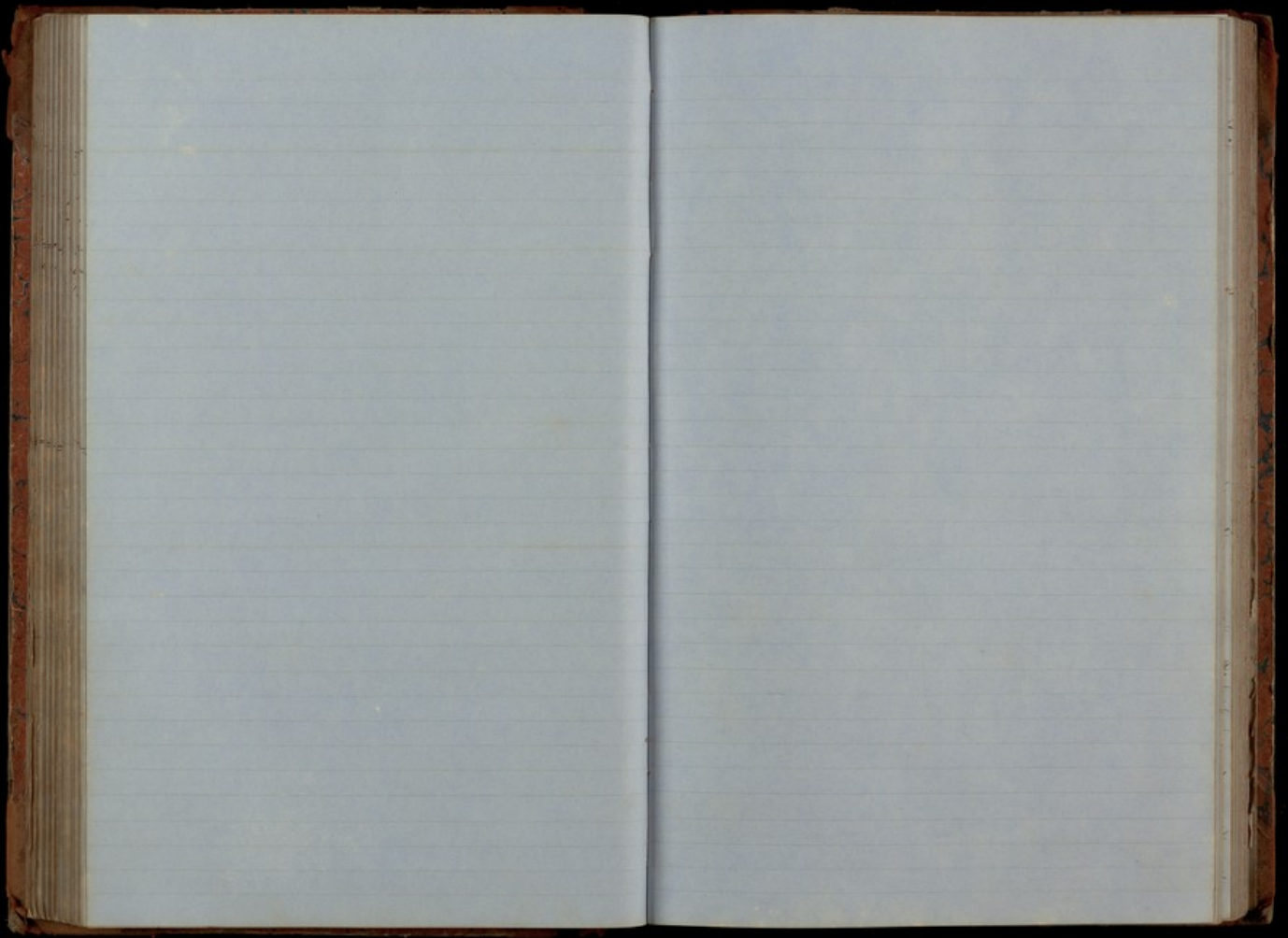
made at Mafaste Sept. Balatkawa
ending 30th June 1856

Date	Baromet	Thermometer						Mean			Degree of Humidity	Direction of Wind	Sky	Moon	Prevailing Diseases						
		Air	Shade	Dry Bulb	Wet Bulb	Highest 24 ^{hrs}	Lowest 24 ^{hrs}	Temp. in shade	Daily range	Computed from					Small Pox	Measles	Whooping Cough	Dysentery	Diarrhoea	Cholera	Other
June 22	29.570	80.00	85.00	78.50	71.00	83.00	62.00	72.50	21.00	67.25	.695	S.	clear	.	81	39	25	1	19	6	184
" 23	29.570	80.00	86.00	78.00	70.00	84.00	60.00	72.50	20.00	66.00	.678	S.E.	S.	.	80	39	25	1	18	6	182
" 24	29.680	81.00	94.00	78.00	70.50	87.00	61.00	74.00	26.00	66.75	.695	S.W.	Cloudy	.	72	30	19	1	17	6	175
" 25	29.560	74.50	98.00	72.50	65.50	80.00	61.00	70.50	19.00	62.00	.710	S.	clear	.	68	33	21	1	14	6	178
" 26	29.600	80.00	94.00	79.00	70.00	83.00	58.00	70.50	25.00	65.50	.647	S.W.	S.	.	71	30	25	1	15	7	171
" 27	29.540	74.75	105.00	74.00	64.00	81.00	55.00	68.50	25.00	64.00	.611	S.W.	S.	.	70	34	27	1	16	6	166
" 28	29.510	60.00	.	58.50	57.00	64.00	52.00	58.00	12.00	56.00	.945	S.W.	Cloudy	28.50	67	30	29	1	15	8	162
" 29	29.600	70.50	88.00	70.00	63.00	78.00	57.00	67.50	17.00	64.50	.708	N.W.	Clear	7.00	68	35	28	1	16	8	170
" 30	29.670	75.00	89.00	74.50	66.25	81.00	55.00	68.00	26.00	62.17	.680	S.	S.	.	68	34	28	1	16	7	178

The highest reading of the barometer
mean for the period 29.560. The mean temperature
differs between the highest reading viz 87 on the
24th & early morning of the 29th to extent of 1.886 inches.

was 29.67 on the 30th and the lowest 29.47 on the 24th
of the period was 68.11 and the range 31st being the
24th and the lowest viz 52 on the 28th. Rain fell on the

(Signed) J. P. Mather
Staff Surgeon



Observations on the Loss Returns of Sick of
the Army in the Guinea to the 30th June 1784 -

The Strength of the Army in the Guinea according
to the Returns in the Adjutant General's Office may be
taken at 53323 men - 7122 joined the 11th Regiments
and 6036 as drafts to Regiments already in the Command
and there were sick absent and on Command at the Com-
-ment of the 20th 9219 - making a total of 60098 -

17501 were admitted into Hospital in the Guinea in the
course of the quarter, and 5806 remained sick at its termina-
-tion making a total of 23307 - of this Number 17477 were
discharged - 12228 to duty - 350 as Invalids to England, and 2021
to General Hospital at Sentoria, 19 of whom died in the passage
down -

14771 died of disease or wounds in Hospital, and
548 were killed in action with the Enemy leaving a force of
48788 at the close of the quarter in Land - These are contained
the Deaths at Sentoria, and the other Hospital Establishments out
of the Guinea - but the whole mortality in the course of the
Quarter amounted to 33768 - and in the Adjutant General
returns besides were Invalided, which are put down at
3201 - 1444 are returned as having joined the Depôts
of their Regiments -

During the month of April there was a
general, and decided improvement in the health of
the Army - the new drafts were better attended to, and
altho' the duty was still severe from the recommence-
-ment of active service operations it had not affected them
so much as it had previously done, nor that the weather
was mild, and their physical condition ameliorated -
Some Regiments continued to suffer more than others
particularly from Fever, and of this Number the 38th in
the 3^d Division - the 2^d and 9th the 2^d Division, and the
79th 2

79th in the Highland Brigade were remarkable -

In the 79th the prevalence of Fever was traceable in
a great measure to the site of the Camp where it was situated
which was pitched on the western slope of the Red Hill
length in a dip where the soil was clayey, and below
close to the sea face, and which it was found almost
impossible to drain thoroughly -

This circumstance had been noted, and pointed out
to the military, but there were urgent military reasons
for its occupation, and it was long before the removal of
the Camp could be consented to - It was at last sanctioned, and
the Regiment was successfull in higher and drier ground, and
a great improvement in its sanitary state almost imme-
-diately took place -

At a later period the 31st Reg^t was put into the
barracks which had been occupied by the 79th, and was attacked
with Cholera - as were two battalions of Artillery, and a
small arm Brigade that were successfull outside the lines
just above where the slope terminated in the plain, and
where the soil was of the same nature - The Small arm
Brigade, which had only just landed from England was
seriously affected, but the two Battalions Art^y which
had been brought down from the Camp in front - I visited the
succumbents as soon as I heard of the condition, and found
15 men with out of a strength of 90 in the Small arm
Brigade, and they had at that time but grown by the disease -

Had the whole succumbent moved that afternoon
to a hill further out in the plain, and an immediate
improvement took place in the health of the men both of
the Battalions and Small arm Brigade - This circumstance
took place at the beginning of June, and in stating it
here I have to a certain degree anticipated the official
Journal of events - for Cholera first appeared early in
May, and proved fatal to many - It attacked the
Regiments -

the Regiment, nearly a third in the Country, and accounts to be had joined their respective Regts. - It was first noticed in the Second Division, and was for a time confined to it, and the 4th Division -

It broke out after a shift of wind to the S.E. and most of the first cases occurred either in the Camp, or in town who had just returned from a tour of duty in them - After a short period the disease subsided in front, and attacked the Troops in, and about Malabar.

Some batteries had a march this quarter and were encamped on high, and fresh ground near St. George's, did not escape the prevalence, & that whatever the cause of the disease maybe, it is clear that many of our former received orders are erroneous - For instance, the disease when it appeared in the 2nd Division was ascribed to the impurities in the Lakes, and these were very properly removed, so far as circumstances would permit - A Russian Cemetery too was supposed to bear a strong influence over one portion of the Lakes, but subsequent examination proved that it had not been used actually as a place of sepulture, and even if it had, the distance was too great to admit of its receiving any very marked influence -

The proof was that other causes besides these must have been in operation, such as fœtides, atmospheric changes &c. - because tho' the supposed receding cause still remained, the disease suddenly subsided in front, and made its appearance at a distance among Civilians and Troops in, and about Malabar and Calicut &c. -

Bad water, improper food, and circumstances that were assigned as receding causes of the disease in the 7th Regiment, by a Noble Gentleman attached to the Regt, who thought it necessary to write a dissertation on the subject.

subject for Lord Parnham's information, and in due course the Lord's Gentlemen's order production came out for reply - but unfortunately for his honor, the disease broke out, and proved most fatal while the Regt was still on board Ship off Kutch, and before he then had 2000 set foot in the Province at all, so that none of the agencies to which he alluded, except perhaps, certainly could possibly have been in operation - No one denies the importance of good water, wholesome food, and ample space, and here, at that time, might with propriety have been added moderate duty, for the preservation of health.

But the Lord's Gentleman says it is clear, with respect to his Medicum of Officials, or Newspaper fame of the reports of the Medical Department, &c. he would have conjoined himself to the principles of his own profession, which admit of revision and reconsideration, as much I have to thank is the Sanitary Concerns of the Army - But he is not the only Clerical, who has thus thought fit to dabble in the affairs of his Neighbors without good & sufficient reason -

In April I find the following account in my weekly report of Sick to Lord Napier, of the 20th of that month - The admissions from some Camps are fewer, but amongst the number there are three from Cholera - two of which have died, since the weekly state was closed, and the third is in a very precarious state, and not likely to recover - Two of these cases occurred in wounded men in the Castle Hospital at Malabar, which it is difficult to account for, unless they brought the seeds of the disease down with them from the front, which I hope was the case, as there is no local receding cause that I can discover - The tent in which they were accommodated was perfectly new, well situated - properly ventilated, and not over crowded.

In May -

In my report of the 1st May I find a death from Cholera reported in the 10th Regt. a cavalry & sword Corps, and one in the 8th Hussars - a man who had just returned from Venice where he had been for a length of time under Medical treatment. On his return he took to drinking, and the night before his attack he was seen lying on his back - so that in this case the man's own impudence, invited the disease. The above facts are accompanied by the following observation: "These casual cases of Cholera create uneasiness on account of what may follow rather than from any amount of actual disease that exists at present." This fear was realized very soon for the next day the 8th three deaths were reported, on the 9th six, on the 10th six; and on the 11th ten, making a total of sixteen which I had to believe in my next weekly report - Up to that period no case of the disease had been reported in the 3^d division, and the attacks in the other divisions were too generally diffused, to admit of any immediate local searching cause being fixed to account satisfactorily for its appearance.

The origin of Cholera cannot be said to depend entirely on any local cause, as it has occasionally appeared from certain localities where it has occasionally appeared, but it is clear there are conditions of the atmosphere, not yet well understood, which seem to favor its formation, and diffusion - On the present occasion a hot moist south easterly wind which prevailed on the 7th, and 8th of May appeared to bring out actively, and disseminate the virus of this fearful pestilence - On the 10th and 11th its spread was checked for a short period by heavy fall of rain, which saturated the earth with moisture, and cooled the air - This was but temporary, for in the course

of the following week the mortality rose from 11 to 119 - It attacked chiefly the newly arrived Regts, and the Buffs, and 101st Regt. suffered most, the ground on which they were encamped being objectional from its flatness, and the tenacity of the soil, and after the heavy rain of the 10th and 11th it became a perfect quagmire - They were removed immediately to higher and drier ground, with the happiest effects, but the camp of the 2nd Battalion of the Regts. a newly arrived Regt. also, could not be changed for strategic reasons, and they remained where they were, but the ground had been sufficiently tenacious to shield the Regts, and 101st was placed, and they had not suffered so much -

Towards the end of May the disease moderated in Camp in front, but broke out with great violence amongst the Troops, and shipping at Belvedere -

At the beginning of June the disease appeared with more violence than ever, and in the hospital sent to the 9th I find 274 admissions, and 141 deaths reported, to which had to be added 81 admissions and 30 deaths in the force at Belvedere - It attacked the Sardinian Army, and Land S. Corps about this time, as well as the Merchant Seamen -

In the weekly report of week up to the 11th I find the following account - "It is difficult to trace the source of Cholera in all cases -

I may mention V. Battery of Artillery which arrived from England on the 4th June, and was encamped on a dry grassy slope between Head Low and the Monastery of St. George far away from the contamination of all other Camps, and on ground that had never been occupied by troops before - yet Cholera broke out amongst the men, and 16 of them had died at the time the report was written, and nine more were labouring under the disease -

As far as the state of the Camp is concerned it is to all appearances unexceptionable, but still as the disease had made its appearance there, I recommended Captain Sleaf to move his Camp higher up the river, and an additional quantity of Rice was added to the mens diets which they requested themselves - and Lord Napier immediately sanctioned.

From the 10th to the end of June the disease continued to increase - and became more general - on the 20th Major Gen^l Escomb - Adjutant Gen^l died - and on the 21st Lord Napier fell a victim to a modified form of the disease - Several Escomb was ill on the 11th some and exposed himself the whole of that day and the greater part of the next during the day of June and the very fatigue developed the disease in the characteristic form - on the 23rd the Lord and Major had assumed their functions - but had did not return and in the course of the afternoon there was a fearful thunderstorm - which seemed to reverse a baneful influence over the disease, and bestowed the gentle powers of life to such a degree that nature was enabled to rally, and he died about four in the morning -

Lord Napier whose mind was much depressed by the repulse of the 10th, as well as by the sickness and death of his personal friend the Adjutant General, was seized with profuse perspiration, colic, purging on the 22nd, which went on for three or four days without attracting much attention, and he continued to discharge his official duties up to the Morn^g of the 24th when I was called to see him by Mr Pendergast his personal Medical Attendant I was much struck, and alarmed at his altered voice and appearance, soon then by the urgency of his symptoms and in suppressing my apprehensions to Mr Pendergast he said

he said he thought much of what I saw - & unknown I suggested that his Lordship's illness should be kept private - and the next day still feeling apprehensive I recommended some one to be called in - in consequence Mr Pendergast named Mr Alexander D. G. Esq. of the 2^d Regiment of Horse Guards - who saw his Lordship in the course of the afternoon, and told his personal staff that he had not a simple unfavorable symptom - Lord Napier's voice was hoarse - and altho' his skin was warm, and pulse distinct, he had not power over the sphincters - and about mid-day on the 24th he was suddenly seized with oppressed breathing, and died between 8 & 9 in the evening -

The number of Cases of Cholera admitted during the quarter was 1400, of which 894 proved fatal, and by Cases of Dysentery died out of 4880 - 24 Cases of Dysentery also out of 684 proved fatal -

Next to venereal complaints, in point of mortality came Fever, and in point of numbers they presented the following were under treatment in the course of the quarter, and of this number 1400 died -

Wounds and Injuries were also numerous the quarter and 224 deaths took place under that head, Active Surgical operations commenced early in April - On the 7th June the French stormed the Barracks, and the English attacked, and carried the quarters in front of the Barrack - with comparatively little loss, but in the course of the Night the Russians made several attacks to dislodge them, and in the course of the whole operation 11 Officers, and 122 Men were killed, and 11 Officers, and 511 Men were wounded - On the 10th June a combined attack was made on the Moulahoff and Mulla by the Allied Army at day break in the morning, and in both instances the assault was repulsed - The loss of the English

of the English on that occasion was 21 Officers -
and 256 Men killed, and 71 Officers and 1403 Men
wounded - On the night the Russians made a
sortie which was repulsed, and we lost 7 Men killed
and 42 Wounded, making a total of 1024 - *hors de combat* -

On this occasion every preparation
that could be thought of was made, and the wounded
I believe, were placed in as favorable a position as
can ever be expected in warfare - Indeed they
were much more favorably placed than is generally
met with, and the result was satisfactory -

J. G. H. H. H.
Inspector General of Hospitals -

(Observations on the Sanitary Returns of South of the Army in the Crimea for the Quarter ending 30th Sept. 1855)

At the commencement of this quarter the Army in Turkey consisted of 42,600 men, of which number 1898 were sick absent, or on command, and 5701 men joined in the course of the Quarter -

In the Crimea 4238 sick remained under treatment at the end of the quarter 27,257 were admitted into Hospitals, of which number 2769 were discharged, 1579 died, and 3380 remained under treatment on the 30th September - Of the number discharged 22,225 were dismissed to duty - 871 as invalids to England, and 14099 to the several Hospitals down the Bosphorus - John's letter number 9 deals on the former point - but of the number who died out of the 47 sent to England, I have no data, from what I can make a statement, but from rumours that have reached me, I fear the mortality on board the *Southampton* which took rounded, was considerable, as *Sunderland Hospital* appears attached some of the Cases, and the voyage was a tedious one - If any accident or disease happened to the sick and wounded on board either the *Southampton* Hospital Ship it was not for want of due care in fitting them out, and equipping them, for they possessed every comfort and convenience that could reasonably be expected in such Circumstances - Indeed greater care and precaution had been taken in fitting them out for the Service so that no complaint can with justice be made on that head -

The following Summary of the leading diseases with which I take view the heads under which the the most fatal complaints were admitted -

208 of -

185

Cholera	2074	2210	49
Diarrhoea	2321	460	93
Cholera	116	496	312
Wounds	?		
Small Pox	2773	4188	434
Scarcities	942	448	9
Fractures	13	10	12
Amputations	50	54	12

At the commencement of the quarter, Cholera and Diarrhoea prevailed to a considerable extent but from about the 15th of July to the end of the month there was a marked improvement in the health of the Army with the exception of a Squadron of the 10th Hussars detached to a place called *Ternov* about twelve miles on the *Raiders* road, and a cavalry avowed Regiment, stationed at *Radiker* in the first instance, but subsequently removed to the western heights of *Kalakkara*, where the *Regiment of Guards* were formerly posted and finally to the camp in front of *Solostopol* -

Radiker is built on a slight hill where the Valley leading from *Kalakkara* opens into the plain, and is not a desirable place to send troops to on their first landing, but there was some military reason for the arrangement, which I do not now exactly remember, and the 10th were allowed to remain there until *Cholera* became so prevalent amongst the men that it was deemed prudent to remove them to the heights - This change was attended with some, but not such bad the advantage as I have occasionally noticed from similar moves on other occasions - but the reason doubtless was owing to the men being employed daily either on guard, or on fatigue duty in *Kalakkara* - So that altho' the locality -

locality of their Camp was changed many of them were exposed for several hours daily, not only to it, but to the deteriorating influence of the air of that place -

The 51st, 11th, & 39th Regiments suffered from Cholera in Camp this month; but during the latter two kinds of it there was a marked decrease of Epidemic Complaints in the Army at large -

Towards the end of July the weather changed from dry heat to a moist southerly wind, and was followed by a heavy fall of rain at the commencement of August, and a re-appearance of Cholera in the 7th Regt and some Companies of the 51st again which had recently arrived from England - This outbreak was of short duration and not of any particular violence, and with the exception of the newly arrived Corps, its prevalence was nevertheless afterwards - It could not be said to have ceased altogether until December, but the attacks were so scattered that they attracted little attention except in those Corps of Cavalry recently arrived in the Crimea, and here again - There was at variance with actual opinion

The 2^d and 3^d Regiments and Carabiniers was encamped on the plain outside Rediker on their arrival, and not in the Rediker Valley with the rest of the Army Division - Here Cholera soon showed itself, and under a supposition that the ground they occupied was not the most desirable, it was changed at the suggestion, I understand, of the Sanitary Commissioners, but without any marked advantage, or diminution of the disease, altho' the new site of the Camp was higher, and apparently better situated -

The 11th Hussars, and 12th Lancers, both Regts recently arrived from India were encamped on high, dry, and apparently eligible ground, between the

Rediker -

and Karani valleys, but they did not escape Cholera - The 12th did not suffer much, and was not attacked early, and the greater part of the loss in the 11th was confined to the Squadron detached to Tchernaha -

Another curious instance of the erratic nature of the attacks of Cholera occurred in the 3^d Division at the beginning of September - The 3^d Division was so much concentrated in Camp, as any other Division of the Army, and of course exposed to all the local disadvantages of such a position - During the week ending 4th Sept: 11 admissions, and 11 deaths from Cholera were reported in the Division, but in a remarkable fact that 7 of the admissions, and 3 of the deaths, took place in Detachments of the 39th, and 19th Regts employed as a guard in collecting forage in the Karani Valley -

From this period until the General health of the Army improved, and Cholera gradually disappeared, but on the 8th of September the Redan was assaulted by the English, and the Malakoff captured by the French, with heavy loss in both Armies -

In the British the loss was 29 Officers, and 447 men killed, and 124 Officers and 1966 men wounded - One Officer and 170 men were returned missing - making a total of 2386

Nearly the whole of the great mass of wounded was brought in in the course of the afternoon, and early part of the Night; and accommodated either in their own Regiments' Hospitals, or in the General Hospital in Camp, and their injuries promptly and properly attended to -

The men who fell too near the Enemy's works to be removed were brought in at day light, the following morning, as well as such wounded Russians as had been left behind by their Countrymen -

The imbalance on this occasion did not hold -

well, and the Mule Chais and stretchers were found
very useful - Numbers of the wounds were compara-
tively slight and before the 22nd we had been dis-
charged from Hospital, but from the nature of the
Services the men were employed on, a great
many shot thro' the Chest and upper part of
the body, and as these wounds are generally
dangerous several of them proved fatal -

Special returns have already been forward-
ed of Wounds, and the detail of particular cases
will be found in the reports of the several Med:
Officers in Charge - I may however here
allude to the extraordinary success of
Staff Surgeon Weather's practice at the Castle
Hospital, Ballinacree, which says much both for his
ability, and skill as a Surgeon, and for the salu-
-briety of the Situation -

Signed) S. Hall
Director of Staff -

Abstract of the Quarterly Return of the
 Lost and Wounded - of the Troops in the Crimea -
 from the 1st of October 1853 to 31st Dec 1853

Diseases	Diseases					Diseases - Cont'd.	Diseases						
	Number	Number	Number	Number	Number		Number	Number	Number	Number			
Col. Cholera	14	10	102	30	7	12	Colic	1	12	10	16	1	9
2d Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
3d Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
4th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
5th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
6th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
7th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
8th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
9th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
10th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
11th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
12th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
13th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
14th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
15th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
16th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
17th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
18th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
19th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
20th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
21st Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
22nd Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
23rd Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
24th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
25th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
26th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
27th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
28th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
29th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
30th Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10
31st Cholera	17	11	26	70	1	23	Cholera morbus	13	26	29	18	11	10

Observations on the Quarterly Return of
Sick of the Army in the Gambia to the 31st Decr 1772.

The strength of the Army, exclusive of Land Transport and Army Cooks, at the beginning of the quarter was 15,416 - of which number 7000 were absent sick, and a Command, leaving 8516 in the Gambia - they joined from England 2461 in the course of the quarter -

The mean strength of the European portion of the Land Transport Corps, may be taken at 2700 - Since it is put down at three thousand in the return, but that is above the mean strength of the three monthly returns taken from the 1st July 1770 - and the total strength of the whole Army in the Mid. Return is under what the Military force - which makes it 13785 - instead of 15,516 -

There remained Sick at the end of the previous Qu. 5480, and there were admitted into Hospital in the course of the Quarter 17,418, making a total of 22,898 - treated - of these 16,970 were discharged, 1077 died, and 3055 remained at the end of the Quarter - Of the 16,970 discharged from Hospital, 12,478 were sent to duty, 1400 were sent to the Hospital, & 1904 to the General Hospital down the River, 1000 of whom died on their passage down - which added to the mortality in the Gambia would raise it to 1112 -

The following is an abstract of the most mortal, and fatal diseases during the Quarter -

Fevers - Remained, 145 - Admitted, 2077 - Died, 116 - Remain, 187
Synochus - do: 257 - do: 740 - do: 11 - do: 12
Spasms - do: 655 - do: 1320 - do: 53 - do: 306
Cholera - do: 15 - do: 216 - do: 131 - do: 6
Wounds - do: 910 - do: 1407 - do: 53 - do: 11
Contusions - do: 17 - do: 742 - do: 2 - do: 11
Amputations - do: 5 - do: 7 - do: 14 - do: 3
Fractures - do: 51 - do: 68 - do: 1 - do: 32
Head Ache - do: - do: 292 - do: 2 - do: 221

Immediately the heavy trench duty ceased, and the men obtained a due proportion of rest, the health of the Army improved, and with some trifling exceptions continued good throughout the whole quarter - at the commencement of the quarter about 8000 men were employed daily in fatigue duty in road making - hut building, and other duties connected with their own comforts, but the duty was not fatiguing - the weather was fine, and the labour was conducive to health -

The 13th Reg^t, not long landed in the Gambia, and stationed in the neighbourhood of Kailiffa, had a recruit sent back from among other Corps in the Gambia, but the probability is small -

The Land Transport Corps, who only had a heavy sick list during the whole quarter, but had a number of men from two posts - Syponty, and Barber - a number of young lads, recruited in the suburbs of London, and other large towns were sent out in the course of the Quarter - they wanted physical powers for the work imposed on them - they had been unaccustomed to such hard labour - and were drawn from that underfed, and dissipated class of Society in towns which fills the Poor Hospitals at home -

These poor lads, arrived here at the beginning of the Qu^r, and joined a Corps unorganized, and without a sufficient number of Officers, and few commanding Officers to teach them not only their duty, but how to take care of themselves - The consequence was they went out frequently without their bread, were employed the greater part of the day, and returned weary and jaded to their Camp without energy sufficient either to do their work, or clean themselves -

In fact the course of the previous winter succeeded over again on a small scale, and had the duty and privations of the men of the Land Transport Corps been as great as those -

as those of the recruits that joined the Army were
the mortality would have been fearful, but the men
of the Land Corps were well clothed, and fed, and
but there was nothing in either the nature, or severity
of their duty - very vigorous & healthy in spirit, by
the condition of our Soldiers who were attached to
that Corps, performed the same duties - were clothed,
fed, and lodged exactly in the same manner, and of
superior excellent health, the only difference being that they
had learned by experience to take care of themselves -

The same results will follow in the Land Corps, should
the Corps be better organized, and all the healthy inefficient
young men have been disposed of - many of them will die in
prison - some will have to be sent home as invalids, and others
will acquire health, strength, and efficiency with age,
but it was an error to fill the ranks of the Corps with such recruits,
as they would have proved an absolute incumbrance had the
Army been compelled to hold the field in the Spring -

On the 14th November two men of the Guards lost
their lives, and some were injured by the explosion
of a hidden mine in the Redoubt, which was exploded upon
them treading upon it - Numbers of them cowardly
- torments were left in every direction, but I think in
only two, and one other case, was life destroyed by
them - I believe as many as 10 were discovered by our
single Officers, and it is possible many still exist, but
I hope the Russians will reap the advantage of themselves
when they begin to recover substance and repair the town -

On the 16th November a serious and destructive
bomb took place, how occasioned has never been very satis-
factorily explained, but on that day the enemy's magazines
of the right attack, both Land and English, exploded with
destructive effect, and killed, and wounded a number
of men - Fortunately it was at a period of the day the
numbers -

numbers were absent, or the loss of life would have
been still greater - As it was the English had 1 Officer,
and 20 men killed, and 5 Officers, and 120 men wounded.

The loss of the French was still greater - but I am not
quite sure as to the exact number they lost, I heard that
200 killed and wounded - an old bond built full of
ammunition, which was in the immediate neighbour-
hood, providentially escaped - the roof was a fire,
and the door driven in by the concussion -

The explosion destroyed much public property
and damaged, or utterly destroyed several Hospitals
but in the immediate neighbourhood - Still, however, this
two Hospital Surgeons, full of soul without injuring
anyone - but considering the quantity of powder and
the number of shells, and the fact exploded since reason-
to be thankful the loss of life was so small -

In December severe frost set in with a strong
north wind, and the thermometer fell to zero on the
17th and 20th - so many as 249 cases of frost bite occurred
and in two, if not three, cases death was occasioned
by the direct effects of cold from the men getting bound
and lying out, all the frost cases that occurred were
contracted by men in this State, but the generality
of the cases were of trifling import affecting the tips of
the ears from the men neglecting to put down the ear flaps
of their Caps - the fingers from men handling cold
substances, or going with their hands exposed - and the
toes from men sleeping in wet boots - the feet were
out at night to the fire in the intense cold without
either shoes or stockings on, and the consequence was
that both his feet were seriously frost bitten -

The general health of all the men who met
with these local accidents was excellent -

With winter came affections of the chest - of
fever -

At first in the shape of Catarth, but subsequently
in that of Pacumonia, from which disease several
men died the following quarter -
Liquid) Shall
Solid) hepatic -

Observations on the difficulties experienced by the Medical Department during the late War on Turkey, & the Crimea in the years 1854-55 by Sir John Lubbock, K. C. B. Inspector General of Hospitals, and Principal Medical Officer of the Army.

Genl. Lubbock

In addition to the detailed returns, and reports of the Medical Transactions of the Army during the late War, which are now in course of preparation, it may not be out of place for me to make a few general observations on the difficulties which the Medical Department had to contend with during the early part of the War, and the embarrassing position in which the principal Medical Officer was at the very last placed by the Military authorities for want of due, and timely information of the intended movements of the Army, without which it was impossible for him, or any one in his position, to make satisfactory preliminary arrangements for the transport and supplies of the Sick, and under such circumstances it was hardly possible to meet him with success for objects, & purposes which could scarcely be expected to be guarded against; but it would require the publication of the British Correspondence which took place to render this fully intelligible to the public, and as the limits of this paper will not admit of that I must confine myself to such extracts, and observations as will, I trust, render it evident to all unprejudiced persons that many of the reports, & books were so widely, and industriously circulated to the prejudice of the Medical Department were utterly groundless, others were highly stated accounts of real transactions addressed partly to the War-Parliament, but chiefly to the papers of members; and in this the authors had calculated their measures well, for such a show of public indignation was raised against

The unfortunat Medical Department, which was held accountable for all the misery, disease, & death of the whole Army, that a witness was demanded, and, on evidence that has been considered highly questionable and certainly on principles very much at variance with all our preconceived notions of British fair play, the Principal Medical Officer of the Army in the Crimea was selected as the most convenient individual; because he was absent and could not defend himself, - was considered transmitting in infernal funds to take his post, and, therefore, no doubt some consequences were likely to result to any one but himself from condemnation so cruelly accomplished. But, fortunately for him, a higher sense of justice guided the public authorities, and the piece of British pliancy felt some deep order directed head.

To have the difficulties, and hardships under which the Medical Department labored it will be necessary to go back to the commencement of the last war, - to pass in review the whole transactions of the Campaign, and to take into consideration the extent of the Medical Department both personal, and material before the Army took the field. - It being so much a matter of personal honor, & show in that manner became connected with the Army in Turkey, and for this I crave the reader's indulgence.

When the war broke out I was serving in India, and on the 27 of April 1854 received an order to join the Army proceeding to the East under the command of Lord Raglan. On the 12th of May I left Madras for Bombay & thence for Suez, and after some days detention at Alexandria for want of a steamer, arrived at Constantinople on the 17 June.

My order to leave Bombay was confined to the simple fact of directing me to proceed to Constantinople and report myself for duty to the General Officer in command of the British Army, - but that when I arrived there in utter ignorance both of the strength of the Army, and of every thing connected with the various parts of our Department attached to it. But I have from personal experience at the Cape of Good Hope during the latter part of 1847, and 1848, and the Campaign in the East of 1854, that all the various branches of the Medical Department, such as Apothecaries, Dispensaries of medicine, Surgeons, Surgeons Clerks, Ambulances, and Hospital Stores had long been so much reduced in the British Service that they could scarcely be said to exist, and that they could have been created de novo in Turkey, a work of much difficulty, and responsibility under the most favorable circumstances, and in the field in front of an Army nearly impossible to accomplish without much confusion in the first instance, particularly when nearly all the Medical Officers were without any knowledge of anything connected with the field Service.

So convinced was I of this difficulty, that when congratulated by my friends in India on my appointment I could not avoid observing to them, that, altho' the honor was great, and the appointment flattering I would willingly forfeit one year's pay, could I escape the labor, and amidst them I should have to undergo.

This was not from any unwillingness to comply with the order I had received, or to endeavor to undertake that which the public Service required of me, altho' that one third of my income be the charge, but from a conviction of the difficulties I should have to encounter, and for these I was prepared, but for the opposition met with from some

of the members my own department cannot candidly
own who as yet prepared.

My nomination to the Army on the last September
succeeded that of an officer seven years and a half
my junior as a Deputy Director General of Hospitals,
and retired one day's pay, but his friends, Dr. [?]
Lay, recanted this supposed signature on me, and had
nothing that ever to do with the transaction.

Unfortunately many embarrassing difficulties arose
in the course of the war, one which had no control,
and these were eagerly seized hold of, and twisted
about to my prejudice, as well as that of the Medical
Department, my friends from whom I had a right to
expect support in place of opposition.

This as a painful admission to make,
but I have good reasons for saying that the efforts
embarrassed me, and damaged my reputation were so
constant on the part of certain individuals of my
own Department that I was it myself, to see their
own "own" to speak out on the matter. I feel bound to
do so, because I have been told efforts were made to
prejudice the junior members of the Department against
my administration, which was not only subversive of
military subordination, but highly detrimental to the
interests of the public Service.

On one occasion that I heard of this
was done in presence of a civil Surgeon of great
reputation attached to the Army in the Crimea,
who expressed himself strongly on the subject,
and said he was not surprised at what was
reported of the Medical Department after such an
inhibition.

On another occasion the following

dignified rebuke was given by a Medical Officer
of high rank in the Army to a Medical Officer of the
Army. All you say may be true, but, in your position
you are the last person I should hear such things
from.

arrived at
Siberia

When I arrived at [?], in June
1854, I found the Army, which consisted of 20,000
men, had been divided into 4 Divisions of Infantry,
and one of Cavalry, with their quotas of Artillery,
Sappers, and Dragoons.

The Light Division of Infantry had
already proceeded to [?], the 1st,
and 2nd Divisions left for the same destination a
day or two after my arrival; and the 3rd from
Salsopol followed a few days after, leaving the
4th Foot in garrison here. The bulk of the 1st Division
was left at Salsopol, and three of the Artillery, Cavalry,
Sappers, and Dragoons were transferred to the
general hospital at [?], which had just been
opened for their reception; and as all the servants
were poor, and inexperienced, the Surgeon, [?],
not very energetic the establishment was not in
a good order as I found here, and I
was compelled to apply to the commanding officer
additional orders, and a pelique party of fifteen
men to attend morning, and evening to remove
patients, and keep the hospital and its precincts in
order. I also instructed the Surgeon to hire a
sufficient number of American bootmen for
the service of the hospital, which was immediately
carried into effect, and they were in full number
before I left [?] for [?] on the 21st June - Next,
therefore, was my surprise to hear at a later great
party, [?], made that [?] had [?]
been

them to carry out this needful part of hospital economy, as the Turkish general Hospital combined a well arranged and house where their men were constantly employed. *Examine in the General Hospital* an effort was made by the Surgeon at a subsequent period to get this duty done by contractors, but the arrangement did not succeed, and the contract completely broke down, as might have been anticipated in a country where labor of that kind is hardly ever performed by contract; and, perhaps, it would have answered better to have hired master masons at so much a day for the work, as was done in the general Hospital.

The Turkish general Hospital at Constantinople is an establishment capable of accommodating 500 patients. It was equipped, and in good order from the commencement, yet strange to say almost all the work, or committed to the hospitals there, consisted of, and confined their observations nearly entirely to the general Hospital, a large building, capable of containing between 700 & 800 men as a Barrack, which had been hurriedly converted into an hospital, and, as might necessarily be expected, wanted at first many of the conveniences such establishments ought to possess; but it should be borne in mind, that, when temporary accommodation is thus provided for large numbers of sick, or wounded on Service, operations are all that can be looked for at the commencement; but the intentions to be carried out to Constantinople in the winter of 1854 were not disposed to do that, nor to take into consideration the difficulty of conducting large establishments with inexperienced Officers & Servants; and as they did not find all that they had been accustomed to see in the work appointed, and magnificently

and vast large London Hospitals they underratingly condemned the whole as entirely defective in all that was needful for the proper treatment of sick, & wounded Soldiers, and in this way many important Statements went forth to the world, and were received as matters of fact.

I have been severely censured for a Libel Article to Lord Raglan concerning the condition of the Eastern hospitals when I left them on the 21st October 1854, but I feel perfectly justified in making the Statement I then did, and if I had to write the Libel over again should not alter one syllable of it. It was then stated that Constantinople had been accused of the arrival of the wounded from Africa, by want of fire light on the part of the purveyor, and inconvenience experienced from the non arrival of Dr. Williams & Dr. Phillips from Vienna which had been ordered down to Scutari at the beginning of September, but were delayed for want of water conveyance: - at least Dr. Williams's application to have them forwarded by the only opportunity that presented was overruled by the Commandant of Vienna in favor of Pedrauer, & Compendial Arms, which, as it subsequently turned out, were of comparative little consequence, whilst the Medical Services were of vital importance to the welfare of the sick & wounded that had been sent down from the Crimea. Three Regiments, however, had been disembarked before I left Scutari, and the hospitals were in every way working condition. At a subsequent period, when the papers of which I speak were great, Constantinople is stated to have appeared, which is probably enough provided a Surgeon, and such an establishment of Hospital should.

But my Libel had no reference to any thing beyond what came within my own observation at the time I was there.

The same kind of dirt in the water closets, that was described is not improbable, and might arise in a couple of days of attention were not paid to them.

The Turks use water for personal cleanliness upon such occasions, and the pipes of their water closets are loose, and easily obstructed, as I found was the case in the general hospital when I arrived at Scutari in June, which had been reasoned by the soldiers thoughtlessly, or maliciously throwing old shoes, and other articles down them, and we were compelled to get them cleared out at considerable cost & trouble to prevent a recurrence of similar irregularities, I recommended a small iron grating to be placed over each pipe, but, I believe, my suggestion was never acted on in either the general, or the Barrack hospital.

Salubrious water closets were subsequently fitted in all the prisons in the Barrack hospital; and when I passed thro' the Porphyrons on my way to England in July 1856 I was told that all of them but two were out of order. Some person recommended salubrious water closets to be put in all the temporary hospital huts in the Crimea, but not deeming any very great necessity for incurring this heavy expense the recommendation was not carried into effect.

In June 1854 the sick of the Turkish Army occupied one quarter of the general hospital at Scutari, but this was subsequently handed over to the British, and before any sick, or wounded arrived from the Crimea there were in possession of the whole building.

Thinking, however, that it would be desirable to have more hospital accommodation than was provided in June that the Lazarets at Akkodas, for the attention of which I was had already been granted, should be immediately completed under the supervision
London

of Mr. Colwell, the British Consul in the Dardanelles, and equipped for the reception of sick -

I also examined the main Barrack at Scutari, and the hospital at Kuleli before I embarked for Varna in June 1854, and recommended to Lord Selkirk that half of the latter, and the whole of the former, face of the entrance of the former, and the upper portion of the latter should be fitted up as hospital for the reception of sick & wounded of the British Army in case of need.

Some time afterwards an order from the Lieut. Governor was received at Constantinople directing further accommodation for sick to be provided there, and instructing Admiral Boscawen, then Admiral at Constantinople to apply to the Turkish Government for a large hospital ship to be purchased in some convenient situation and converted into a floating hospital, which was carried into effect; and I thought it to be in my charge of the hospital at Scutari, without knowing what steps Lord Selkirk made the same direction, that I had done; and I urged him to get the same alterations done, cleaned out, and equipped at once for the reception of patients. That order, as I informed, he gave to Mr. Ward the Surgeon, but poor Mr. Ward was at that time of life & his mind was in the decline, and he procrastinated from day to day and did nothing until the wounded from the Alma arrived, and then all was hurry and confusion as nothing was ready, and the strength of the hospital left at Scutari could not furnish fatigue parties sufficiently numerous to band the wounded, and fit up the rooms at the same time for their reception. Had Mr. Ward begun from about the middle of August, when he first received the order from Lord Selkirk to fit up a portion of the main

Barrahead for an hospital, gradually to get patients
filled, and placed, with the other necessary bedding,
and utensils in each room as it was purchased
and handed over to him by the Barrahead master,
all the confusion would have been avoided, as the
ground would then have been ready for the capture
of the wounded when they arrived; and for this night
there was no reasonable doubt, because in consequence
of the arrival of the Surgeon on the 20th of September the departure
of 600 sick from Barrahead to Sutherland to him
the embarkation of the Army for the Crimea pointed
out to him the probability of the hospital becoming
a madhouse that could be provided at Sutherland being
speedily required, and urging him to draw Mr. Tucker
from Mr. Tucker at Barrahead to sit of the Barrahead hospital
at Sutherland, and the hospital at Barrahead. Mr. Tucker
was also instructed by me to send down the hospital
equipment from Barrahead as it could be spared, and
as opportunities presented for shipping it off.

On the 20th of July I wrote to Mr. Tucker to urge
the ^{capt} Surgeon, a chief Surgeon to furnish me as speedily
as possible with their true accounts of the end of
June that might show what resources were available
in case of need, and Mr. Tucker's enquiry into what
a quantity of hospital stores had come out from
England in a vessel called the "Furze", and had been
transhipped, was informed, into other vessels at Sutherland
wharf.

On the 25th of August, by my direction,
I received the annexed Memorandum, from Mr. Tucker, the
Surgeon, in place of the return that is called for, and the
information obtained from Mr. Tucker the Secretary of the State
of the War.

vide Memo
of the
25th of August

vide Memo
No. 1.

In my letter to Mr. Tucker of the 26th August
1854 acknowledging the receipt of his Memorandum
I said the following passage.

"I state in the Surgeon's Memorandum
which you have enclosed that he has allowed his store
to run too low in bedding, and as he has never
until now furnished me with any document
that could give me the smallest information
on the subject I had no means of knowing, or
judging the fact, and am which now, after having
perused, and encircled by his report."

"I enclose a copy of a letter from the
General, and an Order given shipped on board
the "Jason", and the "Bombay" Steamers at Barrahead
on the 24th, and you must direct Mr. Tucker to
look out for the arrival, and apply the report
of transports to have the supply landed at Sutherland, or
you will not have the means of filling up the
Barrahead hospital for the reception of the wounded
men."

On the 23rd of September finding that the "Jason"
Steamer had passed Barrahead wharf and was on the
bay with the stores above alluded to on board, I lost no
time in taking measures to get them transhipped onto
the "Bombay" sailing transport for consequence to Barrahead
and the instructions to Mr. Tucker in my letter
of that date on the following terms:—"The "Jason" has
brought the supplies up here, and there are great
doubts whether we shall be able to get them transhipped
to the "Bombay" to day, but I have sent Mr. Tucker
on board to see what he can do in the matter."

By great exertion these stores were
transhipped from the "Jason", to the "Bombay". and it was
no small relief to my mind to learn that it had been
effected.

In another part of my letter of the 21 August to D'Angier
I send the following passages "If you think the platforms
in the barracks vacant with all answers, proposing
places you must intend on the 21st August here for the
"fourth of August" before you, as they will not be
required after the Army leaves Tarawa, which will
be done in three or four days. Hope you will not
relax in your endeavours to secure the whole of the
General Hospital, or in your efforts to purify, and
fit up the barracks for the reception of sick, for you
meet with much opposition in landing. You may have
a couple of hundred boats grounded on your hands
in a few days."

"It will be hard to have two large steamers
appropriated for the reception of wounded in the first
instance, but they, as you know, can only afford
accommodation for limited numbers, and therefore
they must be sent away. I wish, if I saw you, to see
before I embark, send you a return of what we have
in store in Tarawa; but Mr. Tucker is much occupied
at present with the duties of the hospital here, & may
not be able to accomplish it."

again on the 16th of September. I send
the following reply to D'Angier: I am glad they were
able to transfer the stores from the "Jason" & the "Bounty",
which, from the hazardous state of the weather, does
appear now they would not be able to accomplish.
I heard some of the stores got lost, and that one
boat had been damaged alongside the "Bounty",
but the stores were not lost. You will be glad enough
to cause Board of Supply to assemble for the remainder
of here, and all other stores secured, and hasten
the proceedings home, and I say you will prefer to
Mr. Ward the necessity of two being more practical

with his store account in future.

I am glad you have indicated on
Mr. Tucker for Mr. W. D., and if possible
offer such you procure as many as you require,
and as many as will fit up the hospital at the
Tarawa station, say for 500 beds, 20 beds, 10 beds, will
be required in addition to the store of the ship
which Admiral Boscawen has procured from the British
Government, which is a good arrangement, as is the
provision of the whole of the Tarawa General Hospital.
You will require an establishment of Hospital
Stores for the Tarawa hospital, and should your
application be submitted I will give it my whole
support, but you have omitted to send me the copy
of your communication to the Commandant of the
"in your letter."

old fort

Are the Troops are nearly all on shore
and in a day or two will depart to some in hostile
territory on the 21st.

I enclose you an Invoice of medical
supplies sent out by the Director, and you will
be glad to make inquiry about them, as well
as concerning those shipped on board the "Hercules".

Shipping
Department

I have entered more fully into detail
on this subject than may be considered necessary,
but the Shipping Department was at that time a source
of great embarrassment to us. The head of the
a man of 68 or 70 years of age, who for nearly 40 years
had had nothing to do with paragon's, physicians,
and all the junior members, with the exception of
Mr. Fitzgerald, were totally unacquainted with
hospital economy, none of them having been
employed on the duty before. The consequence was
that great confusion ensued. Stores were lost,

delayed, or not sent at all, and no information
could be obtained. Mr Ward considered himself
under the orders of the Director for War, and not under
those of the Hospital Medical Staff, and as his
duty was unobscured, and he was prejudicial
to the public service was compelled to draw up
a table of Subscriptions for the Surgeons Department,
and Hospital Servants, there being none in front of
the time. This table was approved by Lord Layton, ^{22nd April 1854}
and its leading features were subsequently embodied ^{9th February 1854}
in an order from the War Department for the payment ^{12th Dec 54}
of Surgeons in the East. ^{Hospital Servants}

Mr Ward the Surgeon had been reported
by my predecessor as too old for the appointment and when
I assumed charge of the Department recommended
a Medical Board to be assembled to report on his
efficiency. That Board reported him to be
physically unfit, from advanced age, for the
arduous duties of his position, in which I perfectly
concurred, and forwarded the report to England
for the consideration of the Director General, there was
disposal to employ him in some less laborious
situation at home; but when instructions came
out for his removal interest was made with Lord
Layton in his favor, & he decided on retaining
him on his appointment contrary to my strongly
expressed opinion of his inefficiency; and on this
point there could be no mistake, as I was sent for
by his Lordship on the subject, and fully explained
to him, in the interview what I did, that however
young, and vigorous an officer Mr Ward might
formerly have been, he was then, from his advanced
age physically unfit for the laborious duties of
his appointment.

Some one had seen the old gentleman looking
jealously with his coat off - My representation was dis-
regarded, and he was retained in the Chief Surgeon's
the department of the Peninsula, and then surgeon
of the Medical Department.

The number of officers employed in the
Surgeons Department was much too limited in the
first instance, and it was important to have a man
of Mr Ward's age and amount of practical experience placed
at its head; but there was difficulty in obtaining
a fitting person for the appointment, as the number
to choose from was limited - Mr Ward had been in
the Department in the Peninsula, he had some knowledge
of the duties of the position, and was, therefore, selected as an eligible
person for the situation.

Early application was made to have the
Surgeons Department augmented, which was readily
granted by the home authorities; but the young
gentleman who were sent out as clerks were totally
ignorant of the duties they had to perform, and without
in the least knowing to supercede him, or undertake
their spots, they were not of the same assistance that
they were. Some of the Surgeons had nearly
no able practical experience of the duties of hospital
clerks or their clerks, and I believe not more than his
or three had ever done duty in general hospitals
before. There was one or two exceptions that
deserve mention (Mr Fortescue in particular)
whose much zeal, and unnumbered applications were
displayed in the discharge of their duty, and all were
requiring business habits, and the whole Department
was opening order, and regularity under the
able superintendence of Mr Robinson before the

arrangements, and had it continued, I am confident we should not have again experienced the difficulties which we had to contend with at its commencement.

Table No. 3. Abstract of the monthly strength, and appearance of the Sanitary Department of the Army in the East from April 1854 to June 1856.

1854

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Average		
													Strength	Sickness	
Present for duty	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Present sick	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Absent with leave	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

1855

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Average		
													Strength	Sickness	
Present for duty	5	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Present sick	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Absent with leave	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	8	27	27	27	27	27	27	27	27	27	27	27	27	27	27

1856

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Average		
													Strength	Sickness	
Present for duty	8	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Present sick	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Absent with leave	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	11	14	14	14	14	14	14	14	14	14	14	14	14	14	14

The attendance however, was made in the severe measures which were pronounced on the Medical Department, for the want of experience both of the Sanitary and Hospital Services, and our establishments were contracted in the first instance into three of the peninsular hospitals, which completely organized hospital corps with them from France, and Algeria, and had not, as was the case in the Peninsula, a fund of Sanitary, Hospital, and other details which could be found after the war had commenced.

These are important considerations which must admit in the organization of hospitals, which are founded in by thousands, and had been otherwise conducted in their course here placed in charge of the administration they would not, perhaps, have found it quite so easy as they imagined to produce immediate order and regularity and great elements. It is one thing to find fault which is easy enough, but it is quite another question to organize, & conduct large establishments under the disadvantages circumstances in which the Medical Department found they placed at the commencement of the last war. In such a state of embarrassment few of the Medical Officers had ever seen any active Service in the field, and the junior ranks were, from the sudden demand for Medical Officers, especially filled up with young men from the Schools, who, however respectable in their professional capacity, were totally ignorant of all military arrangements, and had little idea of their duty, after they joined the Medical Department.

Abstract of the Medical Services -

The quantity of Medicines, and Surgeons' Stores ordered out from England in the first instance, would have been amply sufficient for the Army had they not accompanied it, or been stored in the country previously; but some delay took place in forwarding them, and the Army occasionally got so mixed up with the General Stores of the Army, that it was difficult to trace them.

Some of the Stores were on hand at various periods, a large pile of Stores on the ship with the hospital mark on them, which directed the Surgeons to take possession of. No one could give me the best information about them. No one, that I could find, knew how, when they were landed, or what ship brought them out. There was one occasionally transferred from one depot to another, the Commanders were not always careful about them, and as they did not sign bills of lading, they did not consider themselves responsible, and gave themselves little trouble concerning them. So that difficulty was now & then found in tracing them, and delay took place in the delivery.

The Army changed its base of operation three times in six months, which created confusion in the Store branches, and to obviate the difficulty of sending those that belonged to the Medical Department to the home authorities, that, in addition to any other brand, every package should be marked Hospital Stores in large letters.

All medical Stores at the commencement of the war were addressed to the Surgeons of Lord Raglan's Army, - then they came addressed to the Principal Medical Officer, after that to the Commanding General, & finally to the Store Keeper General.

General Supply of - The original supply of medical comforts might perhaps, have been increased with advantage; but it was difficult to calculate the demand that would be made for them by the Medical Officers, and I understood the Director General sent out considerably more than the quantity, which a Board of Surgeons, assembled for the purpose of taking the subject into consideration, considered sufficient for the probable wants of the Army.

Strength of the British Army in the East amounted to 226,000 men, which, with the British Army, & a portion of the 5th Foot, quartered at Salisburi, was at the end of June 1854 encamped either near Varna, or on the Doona valley. It had previously occupied Salisburi, & Scutari, and was composed of Regiments brought either from the British Station in the Mediterranean, or direct from England.

State of Health of the Army - During the past quarter the Army enjoyed good health, as will be seen by the following Abstract of Admissions, Discharges & Deaths, in the different General, & Regimental Hospitals.

Out of a Force of 25481 men there were admitted into hospital during the quarter 5317
Discharged from hospital - 4033
Died - 37
Remained under treatment at the end of the Q^r 1247
Being in the ratio of 2205 per thousand of strength to strength
of 1.452 per 1000 of deaths to - 20
" of 11.89 per cent of sick to 1000

Which complaints were most prevalent in the 5th Division which occupied Salisburi from the early part of April to the end of June.

Thus the medical officers ascribed to exposure, and irregularities of the men themselves, but I think it probable locality may have increased

considerable influence over the disease, as shewn by the reports that the cases of Fever became of a more serious character, and the death increased in number as the season advanced.

The 27th Regt, which was quartered in a part of the large infantry Barrack at Bhubair, that was not so well drained as the rest of the building, had some severe cases of Fever before it was boarded for Varma, but the disease disappeared on its removal. At the commencement of the quarter when the weather was hot, cold, and changeable affections of the Lungs were common. And I was informed that sometimes with disease of this nature considerably advanced were embarked with the Army under an impression that the climate might prove beneficial to their complaints, but those who recommended this forgot that an Army on board in the field is surrounded not strengthened by such proceedings.

In the month of June several complaints began to prevail amongst the men, and on the 19th Regiment quartered at a place called Aladique two cases appeared the character of Asiatic Cholera, and one of them proved fatal, on the 17th of that month, after a few hours illness. Another case of Cholera of a mild character occurred in a Company of Sepoys & Minors, which was employed in visiting a wharf at the upper end of the Drome lake near Aladique, and a fourth, which scarcely deserved the name of Cholera, was admitted into the general hospital at Varma.

There were all the decided manifestations of that formidable Disease which made their appearance during the quarter. But the heat of the weather, the heat, and general tendency to Diarrhoea amongst all troops made every one look forward with anxiety to the future

and these fears were but too truly verified by an attack of Cholera on the 20th of the following month which rapidly, and fatal spread, thro' all the Divisions of the Army.

When the Epidemic broke out the troops were each clad, with feet upon mats, and different sorts of food, and were not habited in our work dress, as they had little or no public duty to perform, but Brigades, and Divisional field days were frequent.

The valley of Drome is not famed for its salubrity during the summer, and autumn, and the weather exercised an injurious influence on the health of the men.

The ration bread that was served out to the men was dark, stow, and often badly baked. The meat was poor, thin, - the supply of vegetables, and of condiments, such as salt, pepper, &c. scanty, & uncertain; and the men had not learnt the art of cooking, and knowing better best advantage the resources at their command.

When the Army landed at Varma a large ^{side ground} Turkish Barrack composed of five grand angles that I Plan 12^b by a broad open passage closed at each end with gates, and officers quarters over them was taken possession of by the English, and French authorities for the reception of the sick of their respective Armies. In a portion of that side apart for the English sick the apothecary, and purveyor's stores were placed, and the remainder was occupied by patients to the number of 350.

The building was miserably dirty, and badly ventilated when we took possession of it, and great efforts had to be made to get the defects removed. Much difficulty was also found in obtaining Hospital Servants from the natives, when obtained they were totally ignorant of the duty.

they were to be employed on, and as soon as they had acquired a little knowledge of it they were frequently withdrawn by their commanding officers, and the whole laborious proof had to be gone thro' again with their successors. This coupled with the inexperience of the Troopers, and every one connected with the establishment rendered the duty of the Principal Ordnance Officer additionally laborious, and proportionally unsatisfactory.

On the landing of the Army at Varanasi it was encamped on the shores of the lake in the vicinity of the town, partly on ground that was stated to have formed the plague cemetery of the Persian Army in 1722-3.

The valley of Varanasi extends from the foot of the town of Varanasi to the village of that name about 10 miles distant. A chain of hills fed by a small stream called the Ponnida, and powerful stream, which rises near Deoria runs the whole length of the valley and discharges themselves, by means of short channels, into Varanasi Bay.

The ground rises on each side of the valley into hills of some elevation - on the south side almost immediately from the Deoria village, and on the north side at a distance of about 1/2 to 1 mile, to a mile, or 5 or 6 miles from the hills arise in close to the upper end of the town taken just beyond Aladnye. The valley then opens out again to form the upper lake, which is bounded to the West, as well as on the N. & South by hills, except at two points - one to the N. W. where the village of Deoria is situated, and there the hills sink, and thro' this break the road to Munirka passes, the other to the S. W. where the Ponnida takes the upper lake.

At the upper part of the lake there is a considerable extent of ground between where the springs rise, and where the clear opaque water makes its appearance.

At the lower end of the lake, on the south side of the valley near Varanasi, there is also a portion of swampy ground between the fresh water of the lake, and the salt water of the bay - the channels of communication between the two being on the north side near the town.

The British Army, as I have said before, was encamped on the north side of the lake near the town on its first arrival; and when the Cavalry arrived they were landed on the south side of the bay, and were camped on the swampy ground between the lake, thro' the bay close under the hills where the road from Allahabad comes over, and where there is a considerable quantity of water in the hills above.

On the 5th of June 1857 the Light Division, which had arrived just at Varanasi, moved about 4 or 5 miles up the lake to a place called Aladnye, and it was replaced there by the 1st Division at the beginning of July, when it removed about five miles higher up the valley, to the head of the upper lake near Deoria, and the 2^d Division encamped about 3 miles to the S. W. and in advance of Aladnye. The Light Brigade of Cavalry moved also to Deoria, as well as two Regiments of heavy Cavalry, and two Batteries of Artillery. The 1st & 2^d Divisions had likewise been ordered to move up the river, leaving the 3^d Division on its original ground near Varanasi. The head Qr. of the Artillery Engineers were near the foot of the hills, and the head Qr. of the Army with all the Ordnance Companies, and Medical Stores, as well as the Genl. Hospital, in Varanasi itself.

The position selected for the encampment of the
Army in the first instance, looking at it in a mere
military point of view, was about as judicious
as one as could possibly have been selected, and
the exact ground that might naturally
have been expected. But when the general took
ground near the country encampment, and
permitted, contrary to advice, in remaining here
could be taken, he was compelled to return
home: and my written observations regarding the
imprudential position of some of the encampments
destroyed at the commencement of the military
were not read on by him beyond submitting
them for the opinion & criticism of the military com-
manders, to be disagreed with me, and nothing was
done to remedy the mistake until problems with
the Army, and then it was too late.

After cholera broke out the high Division
was removed to a place called Decatur, and the heavy
Cavalry, and 3 Divisions of Infantry, & the Salado
Regiment on the south side of Varma Bay, with the better
of some Regiment, which was left to its duty in Varma
and which suffered so severely from cholera that
it was soon found necessary to replace it by another.
The two Regts of heavy Cavalry, and the Light Brigade
were also moved a few miles in a direction of Varma
after cholera had made its appearance in the camp
there.

Only a great military reason could justify
occupying the position taken up by the British
Army encamping at Varma, and this must always be
taken into consideration in our calculations, it
would have been more judicious in advancing

from the position where encamped it on the paleto
heights on the south side of Varma Bay, where the ground
was dry, free from a river, & salubrious, and well
looked the Chocoma. Whereas the other side of Varma
Valley is broad in the autumn, and the most
inconvenient indication gets, especially is, that with
the height of a small channel between the two hills
at Varma, which was deserted when I was there, here is
a rough, unhabited house that stands between Varma
and the Salado Regt, and is particularly in the
height of some miles, considered, which were situated
between the camp of the 1st Division, and that of the Light
Cavalry, that was one, the British temporary General
informed me, could be got to work there in the future.
It does not seem likely that the Division of the British
Army was encamped in the month of July.

The ambulance corps, on its arrival
at Varma, the 1st Division, was encamped near the
heavy Cavalry Regt on the south side of the valley
near Varma, but on cholera making its appearance
amongst the men they were removed to the height of
the Salado Regt. - Here the men, the 1st Division
found the temptation of the land, and from Varma
to a considerable extent, and the other where they
were encamped was too confined to admit of their
exercising the wild, unbroken miles that had
been handed over to them as brought animals
for their purposes. So that the corps which was laid
unpleasant was kept so by this, being arranged.

It was with great difficulty that horses
could be obtained for service at the general hospital
in Varma. The objection stated was that the men
could not be trusted in town, and the supply made
was that the encampment was too distant to be

available for the use of the sick in any quantity,
and if the men could not be housed in town their
services had better be dispensed with altogether.
A more unfortunate selection of men for such
a service could scarcely have been made, and
the whole corps proved an utter failure. There
were no ferriss, smiths, or shoemakers, and a
single man, understood, could shoe a horse,
or know how to put a wagon together. So that
the best damage or delay could not be avoided,
and one or two of the wagons were thus rendered
useless from the first. The harness that was
made for large horses, which were required to draw
the heavy wagons, but no horses of that description
could be obtained in the country, and had any
of the men known how to drive they were unable
to manage the wild mules that they had got, and
accidents constantly occurred. The two wheel
carts scarcely ever went out without being upset,
and so preventing a man from being transported
in the manner recommended by Mr. Drake, so that
except he were bent on committing homicide,
would soon have dreamt of resorting to it.

This corps which had been injudiciously
recruited was not placed in the most favorable
position to become efficient, the officers attached
to it were all intelligent men, but what saved their
effort with such material to work on - Incomplete
as it was though, it would bear being of considerable
value to us in the Crimea at the opening of the
campaign in 1854, and not only so but Lord Raglan
on the subject, but it spoke to him several times,
and pointed out the moral effect it would have
on the men's minds to know that they would not

be left to perish either in the field or in the
city of the line of march. His Lordship must
do him the justice to say, as I never saw that
and before he left Vienna an order was given to ship
onboard the London steamer, but the out of the
balance carrying which he had; but after he had said
some one took upon himself to order them to be
and the out of the 12 men got on shore, but in doing so,
many of the hazardous side of the matter, all the rules
were broken than being left.

After the battle of Alma when popular outcry
was raised against the Medical Department for
want of Ambulance conveyance Lord Raglan took
no steps, Major-General, to punish the authors of the
calumnies, and violation of his own order - He made
no effort to throw the blame of his position on the
Principal Medical Officer, but allowed the storm of
public indignation to spend itself on his devoted
head; he no one knew better than he did that
no blame to be ever attached to him in the matter
as he had done all in his power to have the three
Lubane wagons embarked at Varna, but he had
had greater opportunities than I, Dumbard, and
himself of transporting the best sending stores of
medicine which were mentioned by him on the
line of march from old fort to Beladana.

It was able to keep up and humiliating
disputing to mitigate the pitiable condition in which
the men were left by the way side without
having the means of removing them to the beach
for embarkation, and humiliating the com-
pelled to look on a poor another department
with contempt for medical, which might have been
placed at his own disposal - a position to defect

Commander General Adams, who was in charge of the Commissariat Transport, I am bound to state that he most readily, & willingly afforded all the assistance in his power in these emergencies. He not only gave all the spare transport at his disposal, but he made as much more available by unloading as many of his carts as he could, and his own limited means would admit of in furtherance of the cause of Liberty & Humanity.

The subject of Transport was one of great difficulty from the beginning of the war, and some general officers endeavored to collect the quantity required for two Divisions within as narrow limits as possible. The Commander of the Light Division, when informed, positively refused to allow the smallest supply of medicines, beyond the Lapsus Field Carriers. The latter with the Division when it landed at Vienna - and in no Division was so much clamor raised as in the Light Division were required, in addition to those which had been forwarded to it by St. Dunstons, Principal Medical Officer at Vienna, in opposition to the General's interdiction. Not only was an outcry raised by Mr. Alexander the Senior Medical Officer of the Division, but, in place of communicating with the head of his own Department he made representations thro' the Brigadier General to the Commander in Chief of delays in complying with requisitions, which he said had been forwarded, but which were never received either by the Principal Medical Officer, or the Surgeon at Vienna; & from the confused statement that was subsequently made by the Surgeon's clerk, who was attached to his own Division it is difficult to understand

W. H. H. H.
16. 24. 1794
at the Hospital
of St. Dunstons

how that channel they had been sent, but at all events they were never received.

Even my request to have such demands sent home in future to ensure their meeting with prompt attention, see, is mentioned in Mr. Alexander's Evidence before the Medical Commission, without any explanation of the circumstances which led to it, so that it appears in the light of a routine proceeding.

It is, however, to be every thoughtful Medical Officer who enquired in procuring supplies for the sick of his Division, and as no restriction was ever laid on Mr. Alexander in this matter, nor were supplies ever withheld from him, or any one else, that the public alone could furnish it is difficult to understand the line of conduct which he thought fit to adopt on this, and other occasions; unless his object was to damage my reputation in the estimation of the Commander in Chief.

One or two articles of Medical Supplies were scarce & expensive, owing to the great demand that was made for them after the Siege of Austerlitz, and these could not be replaced in the country although every effort was made to purchase them both on the spot, and in Constantinople, and Remedy's were immediately made or bought for additional supplies. For, where they, one of the articles that thus was out a substitute was found in ground Sarsaparilla, and for the other (Sarsaparilla) Chalk & Bones, & Borax were recommended their use.

Experience of Dr. King being a temperate and judicious use of medicinal substances, &c.

In Bulgaria all the legitimate medicine chests were either in Vienna & what the legitimate surgeons had been allowed to carry, besides which they could draw either on their Divisional Store, or on the general store in Vienna for what they required. In like manner all the legitimate medicine chests were brought up to the Crimea at the end of December 1854 and lodged in store at Balaklava. A chest of this, and of the arrival of Opium, was sent to the different surgeons on the 2^d of January 1855 and they were invited to send home orders of their various supplies; but a doubt was cast upon them that might have been anticipated from the long complaints that had previously been made of want of medicine in the Crimea, and many of the medicine chests remained unopened for months.

Owing to the loss of the Prince Steamer which foundered in Varna Bay on the 16th of 1854 with a full supply of medicine on board, & the death of the chief apothecary, and most of his habits in his successor, a despatching want of Opium and some other medicines, was felt, & reported; but, though Opium in substance was wanting, the store in Balaklava was never without a sufficient supply of both Acetate & Hydrochloric gas, & Opium. These, however, were not considered so efficacious as Opium in substance by some of the medical officers. To add to our difficulties a supply of Opium, and other medicines which had been taken in the "Medway" Steamer at Scutari, for Balaklava, early in December, was taken back in the ship, owing to want of information, and would have been

when had a second time, had not notice been received for an indirect way, of its presence on board, and on being made it was found in the hold, and landed. The Captain, and officers of the ship declared they knew nothing about it. Thus, for want of a few ounces of the good thing, the Medical Department was subjected to the unnecessary delay, and the risk to the property for want of the medicine contained in this very supply.

Order 11, par 58
Serial

18th Decr
1854

In the Canby Division an order was issued directing the Veterinary Surgeon's medicines and appliances, similar to the Surgeon's field boxes to be conveyed or purchased, and on my writing to the 2^d Major General there the arrangements about, he declared to forward the letter to the Commander in Chief, altho' the arrangement lay with his Department. It had to speak to Lord Raglan on the subject, who saw the expediency of the arrangement, and at once ordered it to be altered. Yet, with this restriction or change in the Canby Division, Colonel Byland, Surgeon, in his examination before the Staff of the Parliamentary Committee, makes a merit of having written a private note to Lord Raglan for medical supplies, which, he says, the Surgeons of the Brigade were anxious the principal medical officer should not be made responsible with. Why it is difficult to comprehend, as he would have to order the stores, and it is fair to suppose further, that no previous applications had been made known, by them, on the subject, which was probably the case. And when the stores were sent out to the Staff Surgeon of the Brigade, he, in his acknowledgment

He had been 18 days in hospital, and was
a considerable fever. The tendency
to Cholera now became general. It existed
at Salupati's some slight cases occurred
at Sauteri, and it attacked two drafts of
troops that arrived by Road, Balien, and
the Sangaroe, immediately on their landing.
On the 22nd after a slight gale to the S. E.
which blew over the lake, and most
towards the encampment of the Light Division
at Derna it broke out with great violence
in that Division, and proved very fatal.
The Regiment of the Division were struck,
and suffered in proportion to their proximity
to the Swamp: unless serious was the
outbreak considered, that it was deemed
advisable to leave the whole Division, and
on the 25th it marched about 5 miles in
advance to a place called Sarcator, where
for a day or two there was an apparent
abatement of the disease, but the mischief
had been done, and it soon raged as
furiously as before, and before the end of the
quarter 244 men, out of 5887 had perished
by this disease alone in the Light Division.

The total number of admissions during
the quarter, was just above at the time of 1115,
of which 924 proved fatal; and of these 132
perished in Bulgaria between the 20 July and
1st September 1854. When the disease first
made its appearance Cholera Bills were issued
and directed to the troops, and on the 22 July 1854
the attention of medical officers was called by a
circular Memorandum, issued by the R. F. O. Officer

to the importance of treating the complaint in its
early, and milder state, and pointing out to them
the necessity of early attention to the health of the
man, and of impressing on the men's minds
the great advantage of applying for relief
immediately they found their bowels the least
out of order; for, it is, in my opinion,
generally admitted that that is the best
period when the disease is amenable to
the local treatment.

London Inf.
Regiment
June 1854

Many cases were more had recourse
to in the treatment of Cholera in Bulgaria, but
several officers placed their reliance on Drury
Colomb, & Opium. Several, however, say that
the success was such as to merit much com-
mendation. Such results were anticipated
both by military, and medical officers from
the first operation of Opium as a prophylactic
against Cholera - but the result disappointed
their expectations. I have never seen any
advantage from the use of Opium, on such occasions,
and although I signed the recommendation as one
of a Committee, I did it more out of deference
to the opinion of others than from any conviction
of my own on the subject; for the healthiest
Army I ever served with was at the Cape
of Good Hope, where the men never tasted Opium,
Spirit, or both before proceeding to the
Sanguin, and during that service they were
frequently exposed without tents, or shelter of any
kind to heat, cold, and great fatigue, in fact
they were placed in the very positions that the
advocates for a Spirit ration would have
demanded it, and yet, without it, the

but it seldom amounted above ten or
fourteen, which is no far from a result
as can reasonably be expected or desired
in the field.

The Nature of the Soldier in
Poland, as I have mentioned before, was
indifferent to the Bread, and most
were concerned, and deficient in point of
Cankinents. In this I recommended
the addition to the ration, of what Lord Higham
mentioned. I also suggested that Biscuits
should be substituted for the Loaves, the Beef,
and the baked Bread that was issued, and
Salt, and Pepper kept by the Commissaries, to be
issued to the men on payment, if it could
not be made an integral part of the Soldier's
ration; but this was disregarded, and altho'
these articles are so essential to the men
were compelled to do without them, as they
had frequently no means of procuring them.
A Complaint was made of the insufficiency
of the ration of meat from its poor quality,
and, at my Recommendation, Lord Higham
increased the quantity to about the half. Soon
afterwards representations were made that the
men had more meat than they could use, &
that in disgust they were throwing it away.

A Commission was appointed to take the matter
into Consideration, when it was found that the
Opinions of commanding Officers of Regts were
nearly equally divided on the Subject, and as the
original Order was to terminate when the Army moved,
and was then incompletion, it was not considered

Letter of the
Genl in Poland
& circumstances
concerning it

occupy & interfere with the existing Order of things;
but at the same time more attention was
to be recommended to the kind of cooking, as it was
found that for the men's Messes, a most essential
part of a Soldier's diet; for when the ration
was poor, and then it is never eaten
with any relish, when heated in the ordinary
way. It therefore becomes a matter of great im-
portance in military economy, not only to see
that the men's rations are properly cooked, but that
they are rendered palatable by the addition
of Cankinents such as Salt & Pepper. The latter
attention is generally paid to this Subject in the
British Army, and at a later period of
the Campaign Genl. Sayer, a proper Cook, was
engaged at a liberal Salary, and sent out to
the Army to instruct the men in the best mode
of preparing their food, and he furnished some
very useful information, but, I fear, it was not
always acted on by them. We are all creatures
of habit, and the men pursued following the mode
of cooking they had been accustomed to all their lives.
The improved plans proposed by Genl. Sayer,
I think, he proposed by Genl. Sayer, contained ingredients
that were not always within the men's reach.

On the first of November quarter operations
I wrote the enclosed Memoranda, & submitted
them for consideration; and when the Expedition
of the Army was ordered I suggested to Genl. Sayer
the propriety of having two Steamers set apart
and fitted up as hospital ships to which the wounded
and the Sick, and Genl. Sayer, two Regts not
very well calculated for the Service, were named
by the Royal authorities for the purpose and then,

Vol. 10
Letter to
Genl. Sayer
and Genl. Sayer
the 10th
of the 10th

Surgeons, and orderlies were put on board of them
at Varma. Sales recommended that the best
waggons, Ambulances for ps, and medical apparatus
for the Expedition should be shipped on board of them.
But in place of this being desired for the purpose
for which they had been told off they were filled
with troops, and baggage, and were lost sight of.
So far as the Medical Department was concerned:
and the captain goes of them, the "Glades" falling
independent, at what intervals, having his ship
committed into an hospital ship, steered away
the Medical Store, that had been put on board
at Varma, in the hold of his vessel; and when the ship
was required to take command down to Soutar
after the battle of the Glades, he declared to the
Admiral, that portions of the hold were on board
his ship, and there was no one present to attend
them as the Medical officers had been taken
out of the vessel, and put on board the Langrove
and Dunder at Soutar Bay.

Some months afterwards the cases
containing these stores were found in a fragmental
Baggage Warehouse in Dalaklane, broken open,
and what remained of their contents was handed
over to the Apothecary & Pharmacist there.

No information was given to me by
the quarter master general, of the precise date, and
order of embarkation of the Army from Varma;
and the consequence was that some ships had
several Medical officers on board, others none;
some had medicines, others, others none; and every
effort to remedy these defects during the few hours
the vessels remained in the Bay after the base was
embarked was unavailing, and ineffectual.

Some ships with soldiers on board, as they
embarked first, were ordered to Soutar
Bay without any Medical provision & stores.

Cholera broke out on board; and great
alarm, and confusion was the result.

Even the name of the vessel, that was
to convey about 1000 tons of Medical Stores for the
Expedition, was only notified to me, by the Quarter
Master General, late on the evening of the 26th of
August, and the Expedition was to sail on the
1st or 2nd of September. Now the expected 1000 tons
of stores, for such distinctly ^{quantities} the quantity in any
application for transport, were to be brought down
from the stores at the General Hospital through the
narrow, and crowded streets of Varma, and shipped
from the regular vessels, on convenient, & crowded
temporary wharf without command of either boat
or crew was to be a mystery, for the Quarters' depart-
ment afforded no assistance in either way.

The officer who gave the notification and duty,
think, have duly considered the subject for no
one of any practical experience in such matters
could ever have dreamed that it would be possible
to accomplish the shipment of the stores within that
time by the means placed at the disposal of the
Medical Department, nor would it have been possible,
had such, no communication with land transport,
least some days previously that the "John
Hesterman" sailing from port was to be appointed
for the conveyance of the Medical Stores; and
when I received the Quarters' notification more
than one half of the stores were either on board
the vessel, or on the wharf ready for shipment.
Orders had to be obtained from the Commodore

Want of response
will be a great
disadvantage
to the Expedition
and to the
Hospital.

Want of response
will be a great
disadvantage

for the Service when they could spare them, and back from the agent of transports as they were available. So that from morning to night it was one scene of bustle, anxiety and solicitation, on the part of the principal Medical Officer; and to add this Embarrassment another was given to him of the dates at which the different Divisions were ordered to march on Terra Fortification so that the first embarkation he had, in some cases, was the deposit of numbers dead in the Hospital Square; and on a sudden he found himself called on to make provision for about 2000 dead with hospital accommodation for 500. This was accomplished by sending down a palko to Sauton in the Domingo; and making sailing transports, and increasing the remainder partly on the Jalapa heights, and partly on the north side of the town of Verme, making the best provision for their comfort that time and means would admit of.

When the Army embarked at Verme all the sick were left behind, but the women accompanied it, and were a source of difficulty, when it reached the River.

Cholera, which had greatly subsided in Bulgaria, re-appeared on board some of the transport during the passage, and when the Army reached the River the sick lost accounts to 700 men from the Angares River, Dumber sailing transport took down to Sauton. Some difficulty was found in carrying the duty, and as gross misrepresentation appeared in the public journals concerning it - it becomes necessary to state the real facts of the case.

Sick left some
to be sent

Arrangement
for the disposal
of the sick on the
River of the
Army to Sauton
29th January
present

Angares River
at Verme

It was arranged, in an interview had with the Dock, to board the various transports, but when the Army disembarked at Verme several transports on board were several ships, so he collected by a small steamer, and sent down to Sauton for treatment, in every respect in regard to transports, might appear perfect.

The Division landed on the 14th of December and immediately waited on the agent of transports, Captain Currier to know what could be done to effect to occur the sick. He said he could not name one without the sanction of the Admiral, & returned to him again on the 15th. He informed me that the Angares River had been appointed to take them down to Sauton, and he would give instructions for their being transported on the backs of their respective ships on board of the following day at one o'clock. He gave orders that not only the sick, but all the women who had accompanied the Army, should be transported to the Angares; and as all the boats, and between decks were crowded with the sick, & baggage of the Regiment which had just landed, a scene of great confusion soon took place.

About 2 o'clock, I disembarked at Sauton, & had been ordered on board to superintend the transport of the sick, reported to the principal agent of transports, that the Angares could receive no more on board, and requested further accommodation might be provided. Shortly afterwards I went on board the Angares ship, and with the necessity of putting and being embarked immediately a number of the sick were deposited to the Angares with sick that could not be removed on board, and the Dumber sailing transport was named by him in the course of the afternoon for their accommodation. In the mean time

The captain of the *Langaroo*, seeing a vessel
which commuted with an anchor, hoisted a signal
of distress, and erroneously stated that 1000 sick
had been put on board his ship. That this was
an error, useful, or not, there can be no mistake
as the whole number placed upon board *Langaroo*
on that occasion amounted only to 789 - 460 of
whom were landed on the *Langaroo*, & 329 on
the *Dumbar*; but the main's error did not induce
him to make the representation which he did, but
it did hold him from affording any assistance
in the first instance to the unfortunate men who
had been brought on board his ship.

The story was however readily
in the newspapers to the disparagement of the
Royal Department, who were fully accused of
having crammed 1000 sick into one ship; but
all one single word was said about the
Captain's misrepresentation and inhumanity.

Two medical officers, 2^d Lieut. Staff
Surgeon Dabney, and assistant surgeon Wickham,
were put on board the *Langaroo*; and one, 2^d
Lieut. Surgeon Lefebvre, on board the *Dumbar*, which
was sent down by the *Langaroo*. There were
no more medical officers, as it was deemed
prudent to detach at the opening of the
campaign from a medical staff already much re-
duced by sickness & death, and they were considered
sufficient for a short voyage.

The reports the crowded packet
could not be considered hazardous, so for a
passage of 38 hours, as, indeed, each had recovered
before from a first debatement upon its health. Much
was spoken about the probability of board these ships.

but as only 23 died on board the *Langaroo*, and
on board the *Dumbar* it can scarcely be considered
hazardous amongst the many men laboring under
fever in all its stages.

On the 14th September 1814, as has been mentioned
before the departure of the British army disembarked
at old Fort in the morning without either help or
baggage. In the course of the night it rained
heavily, and blacked, and the rain on shore
was exposed to the full violence of the storm. It
did not rain on the beach until the 16th but it was
nearly impossible to communicate with
the shore, and nothing was heard; on the 16th, the
weather having cleared, and the surf on the beach gone
down again, and horses were got on shore.

On the 12th about one hour, and on the
13th & 14th was employed in collecting and dispatching
the sick & wounded, and on the 15th landed & landed
by the 16th of the day, and the 17th, in getting
them on shore, and procuring conveyance which was
very limited, as could only obtain four small boats,
small landing carts, for the conveyance of the sick
from the beach to the shore, and two for each division
on the landing, and the other kind of small boats
on the line of march, which was a disadvantage
such provisions from being taken on shore
campaign in any manner, and that had
intentionally been laid waste, and where possible
or resources were laid out for the purpose.
But the British army landed in the morning on the beach
of transport, in the reception of a certain number
of baggage ponies for the conveyance of spare ammunition,
and about 70 small mules carts, which the commanding
general had brought with him for the transport of
Barracks

and had not a likelihood of the highly accidently
fallen in with a Japanese conveyance of provisions
proceeding to Sebastopol, and captured 100 such
Country carts, the other Departments of the Army
must have marched without any heavy pack
shakara.

Before the Army left Tarna Sept 20 men
of the ambulance troops, which were all captured, and
the Commandant, said he could spare, shipped
onboard the "John Bastiman" five sleds, with
two canvas bearers complete; but these, and
four, proved quite useless. On landing
at Albat they deposited their bearers in two
ambulance wagons which they found on the
beach, and which had been brought in the London
Steamer without either horses, or harness, and
there they left them, as they said, by direction
of an Officer of the Director General's Department,
under the orders of which the whole Department
was placed by instructions from home.

On the morning of the 17th when the
Army advanced down to the beach, and
saw old men marching as an armed body, &
on halting them to inquire what had become
of their bearers learnt that I have just stated.
They were sent back to the beach to recover their
bearers, but, as might have been anticipated,
returned without them. They were supplied with
others from the reserve store carts, but no useful
purpose resulted from this, as, with the exception
of a few more who attached themselves to the Division
they were nowhere to be found when they were wanted
for any duty.

During the period the Army was in

Sebastopol it had a full supply of best Gunpowder, &
the Hospitals of the Imperial Regiments were furnished
with large Hospital Burgesses, and a proportion of
Equipment for them; but when the Infantry Division
marched on the 11th of September they were left without tools
from the 10th to the 11th of September. The tents were then
got on shore, and the men assembled there until
the morning of the 12th, when they were re-embarked
here being no means of conveying them on the line
forward. The Hospital Burgesses and Equipment
were also left on board ship for the same reason.

The men landed without their knapsacks, and
sandy took with them two horse blankets, camp beds,
kettles, & great coats, with a few accoutrements collected
in their blankets which were scarce either lost or thrown
away, and on the line forward many of the men
scarcely took away with them complete blankets
excepting a few of future consequence. But, some marching
in the night under which they did, many of the men
during the first day, to the distance of 100000, &
should think, could not have reached the beach.
The health of the men, however, had been such
that by the 11th, and the stopping of the
division at Sebastopol, and they were subjected
any prolonged march.

In the state of predisposition to disease,
it was a hazardous experiment to land the Army &
Commence a campaign without cover, and with
such scant means of conveyance as it possessed,
as the days were hot, and the nights cold with
heavy dews, alternations at all times, very trying
to men in robust health. There might be
and doubtless were cogent military reasons
for a doubling the plan pursued; but, in doing

which in a more slender point of view, which
could make more objection than such an
experiment on the endurance of the human
power, for there is a point where the quiver wags,
and the man unfortunately oversteps on his
condition.

At Bulghaich the army came in
collision with the enemy, and a bloody affair
of short duration took place, in which three men were
wounded with cannon-balls, two of whom re-
quired amputation on the spot, and the third
had his right foot laid open by a fragment
of shot. A man was disabled by his horse,
which was shot, falling on his legs, and being
so severely hurt, that it was found necessary to
send him to the rear.

On the morning of the 25th the British
Army was under arms at daybreak but did
not march until 11 o'clock. The general had
more forethought should their march be delayed
and did not strike their small tents, & there
until between 10 & 11 o'clock, when they started
fresh on the line of march, whereas the British
were obliged to remain in so long under arms
before the battle, which alone was commenced.

At Bulghaich 80 men suffering
from Cholera had to be sent down to the beach, and
embarked on board the Cambria hospital ship
on the morning of the 25th, in addition to the men
who had been embarked the previous day, and
great delay & inconvenience was found in
accomplishing the removal of the cholera
consequence.

The English Army, the 2^d Regiment of
Foot, took the inland route, and the French
and Scots that along the sea-coast. The 2^d
Division & Lord Cathcart joined the Army near
Popeye & the British disembarked without being
so much annoyed as the other divisions
expected. Some of the surgeons of the 2^d Division
were unable to procure shot powder & having their
largest quantities, but this was the only division
which had a want of shot, as all the surgeons of
the other divisions had been supplied with powder
in Bulgaria, and had brought them with them.

The distance from the sea at which the British
Army marched varied from 30 to 40 miles, and
sidicousible difficulty was felt in getting the
sick and wounded conveyed down to the beach
the port and beach were for transport & the hospital
at Scutari, and this difficulty continued till the
day from all boat to Bulghaich, where the Army
obtained a new port, and a new base of operation.

Lady's
View

The 25th Sept 1836 the battle of the Alma was
fought in which 25 officers & 327 men were killed
and 73 officers & 1339 men wounded.

The Action terminated at a quarter past five
& terminated at a quarter past five, and
at night of the 25th the British were from Scutari, and
Popeye had at short range they were constant
leave and heavy gunnery operations
were required. During the action at the
British advanced the wounded were taken
to the rear on stretchers, and collected at
different points before the surgeons at the
terminated their, which were

continued without interruption, for eight or ten
hours many of them obtaining little food or
sleep during the whole of that time, but
their unparalled services were neither
understood by their superiors nor appreciated
sufficiently. I fear by the authorities, and
the Medical Department was affected with
Miss representation & abuse. The Surgeon
Major Wainwright in his narrative tells the
concocted information to the public that
10 apt Surgeons had just arrived, who it
was to be hoped, would supply the deficit.

And perhaps the Professor the Management
of the Medical Dept. Now considering
that about 150 trained Medical officers
had been staining every hour to complete
the gigantic work they had to perform
in such a ^{short} space of time. The prominent
participation assigned to these times for these
were only some of them appears to have
wounded people rather partial. But as it
was in keeping with many other statements
put forth at the time, it may be allowed
to profit for what it is worth.

In the course of the afternoon many
of the wounded of the Light & Second Divisions
were collected on the plain about $\frac{1}{4}$ of a mile
in rear of the R. Post, and here the Major
Wainwright the Physician had brought his
field ambulance stationed.

The wounded of the first Division
were placed on sand-bags & tents in a
suburbs close to the scene of action.

and they were all under cover & abandoned to by eight o'clock.
Some of those in the village that had
escaped the confusion were occupied
by men of other Corps. But the greatest
number of wounded were collected in a
Farm Yard in the village where the Major
Wainwright was. To this man of all Corps
were brought, as well as a number of
Refugees wounded, and it soon obtained
the name of the 1st Hospital.

The Professor had to great some accounts
saying members that I directed the whole
part to be covered deep with hay, and as
they were wounded as they were brought in
were placed in rows, their heads covered &
their wants attended to as speedily as it
could be done.

Whatever may have been expected
I know that Sir Richard's soldier left the
& I believe no other field Hospital without
having his wounds dressed, and to various
had I, on this point, that I placed an
officer at the Gate of the Farm Yard to
see that no man was carried until
his wounds had not been dressed.

Soon after the action was over
it became quite dark, and as the
fields of battle was intricate & broken
many men were unfortunately left
on the ground until the following day.
When a field officers party was ordered
out from each Division to collect the
wounded & bury the dead.

At this Mission we felt the want of our ambulances
wagons both in bringing in the wounded
from the field in the short distances & in
transporting them down to the wharves to
be put on board ship afterwards a
distance of about 2 miles &c.

The French lent us their ambulances
wagons one day, and the Admiral sent a
party of 300 Sailors with carts & Blankets
to assist in conveying the wounded.
As we never could have got them transported
to the Sea Beach in the few Weeked
Country carts we had at our disposal
in the short space of 10 days.

The Medical officers of the Navy performed
their services on the field after the
Battle but as they were not equipped their
they kindly undertook the duty of suturing
the wounded, and the Naval Authorities
afforded the transports, but Medical
officers of the Army went down to assist
in all of them with the exception of
H. M. Steamer and one.

The Medical Department was blamed
for the want of Ambulance Conveyance
and it was held accountable for the
ever crowding of the transports, but
on both these points all unprejudiced
persons I think will acquit it of blame.

I add to the difficulties and impediment
of the Report Cholera had broken out in
the 4th Division in the line of March
and a number of men were attacked
by the disease, but by great exertions

all these as well as the wounded were embarked before the
morning, anchored on the Bay of the 25th.

After officers & 135 wounded Russian soldiers
were also sent down to Britain along with the
British wounded, but between 30,000 men had
to be left at Wismar under the charge of a British
officer until they could be removed by the Navy
and taken to St. Helena. Mr. Surgeon Dr. Thompson
1st Regt was detailed for this duty & he was left
without either protection or assistance. To my
application for a guard I was told it was
impossible to get one from the troops and to
my request that some soldiers might be left
I was informed they could not be spared.

But as it was utterly impossible for Dr. Thompson
to be secured to St. Helena, Cook & Gilbert
on a schooner 500 men were sent from the good
offices of the head man of the Hospital were
induced by a bribe of money given to him
by Genl. Collett - His injury happened to
Dr. Thompson at the Wharves but almost immediately
after his return from St. Helena to St. Helena he
was attacked with Cholera & died.

Amongst others who were attacked with Cholera
and died while the Army halted at the Bay
were Brigadier Genl. Tylden, Commanding
Engineer & Dr. W. Hargis a talented and
Surgeon from Edinburgh who had been
tender his services for the Campaign.
Dr. W. Cobell 1st Regt Staff Surgeon who
was taken ill there & went on board ship
where he died the following day.

On the Bay of the 25th the Army marched
to the Heligoland a distance of about

from Malis, & halted there for the night. The following
morning (about 7 o'clock) the sick had to be obtained for a
100 sick but was accomplished with the greatest
difficulty. On the 24th the Army marched to the Malis
& distance was 30 miles from Malis & on the 25th
of the 26th the sick had had 3000 which
was got down to the beach with increased difficulty
and could only be accomplished by exhibiting the
Commissariat officers to unload their carts to assist us
Many men were left by the other side in a lowland
state of exhaustion with nothing but a shirt &
blanket on & no name or any thing to show what
Regt or Division they belonged to. Some were dead
before the convey to the beach left the village
& one or two of these were saved by the names
found written on the lining of the blankets
of these trousers which were ordered to be cut out
& sent to their Regt. - others had no record by
which they could be traced & they were hurriedly bur-
ied in the earth. Some Dr. Jambrook & myself
had to assist in performing these last rites of humanity
for want of proper assistance. While engaged in the
merciful & perplexing duty it may be more readily
believed than described with what feelings the
following communication from a Staff Officer
was received. "Oh! you see the mad effects of
marching without baggage (for the French Government
in Balaklava by way of St. Venzas farm had their
been ordered) Had the Army been encumbered with
bags they could not have done this. I used my influence
to have them left behind. Did you see? what
do you suppose will be the result? oh! I suppose
a little increase of sickness - not a little - perhaps
we had to send 100 men on board ship - being

We are endeavoring to get 200 off tomorrow & may
perhaps calculate on having 4 or 500 and have
long to give baggage the army will remain
efficient at that rate of calculation. To this
there was no reply. Had an Army
occasionally be compelled through here except
to march without tents or shelter of any kind
is a Russian contingency of War but that was
the best of having had his had had no chance
to accomplish this as something more & things
in the military art.

On the 25th the Army made a flank
march to the left and at a place called Malis
there fell in with the rear guard of a Division
of the Russian Army & captured part of its baggage
this day the march was about 15 miles, the
sun was hot & the troops of the Russian Army
great numbers fell out & were left by the
Turks for want of Ambulance Companies
to pick them up. When the force reached the
village of Malis it was found that it had
intercepted the supplies & the men were com-
pelled to bivouac at that place. The following
day the Army marched into Balaklava &
took possession of it after a fierce show
of resistance made by a garrison of 80
men of a local corps belonging to the village
& residing at Balaklava. The public school and
a small Hospital in the village were appropriated
for the accommodation of the sick which was
amounted to nearly 400.

In a day or two the Army took up
its position in front of Balaklava
and began to make preparations for siege.

large operations. The men were still excellent soldiers and as the days passed many of the English were killed, the English effort of the men remaining longer without shelter was pointed out to the Comdant & their tents were landed & distributed to them during the 1st week in October.

Cholera was very prevalent & fatal when the army reached Whakahu and between the 26th of Sept. the day of its arrival, & the 3rd of October 798 patients were admitted into Hospital, of whom 109 died, 277 were discharged, and 118 transferred to the Hospital at Plover, leaving 286 under treatment.

From the landing of the Army in the Bay on the 14th Sept. to the end of September 1854, officers and 367 men died of sickness, or their wounds & 382 officers and men were killed in action and 104 officers & 4030 men, including those that were sent home in the *Impero* & *Genoa* from Tonga Bay, were embarked at Sudaire of whom 6 officers & 340 men died on the passage. In addition to the above 9 officers & 149 men Russian wounded were also sent home making the total number for which passage to Sudaire was provided 113 officers & 4179 men. Besides which between 50,000 Russian wounded were transported on British Ships from Sudaire to Plover.

The arrangements for the comfort and accommodation of this vast mass of suffering soldiers has & much more brains & planning undertaken than those who merely criticised and wrote paragraphs in the newspapers have any idea of. That there were wants & discomforts in the hurried embarkation

of so many sick, and wounded, is one thing, & true, but it was a chosen grade, and more charity & consideration might have been shown towards both the medical department, and the sick army, on account of the peculiar position in which they were placed, but no allowances were made for unusual, and unforeseen difficulties, and those who arrived and departed after they had been surrounded, argued as if they had never been sick, and boasted that they would have done under similar circumstances had they had the management of affairs. It is an easy matter to make this appear plain on paper afterwards, but should have been taken into view from their position & arrangements, and unbounded resources placed on the bare hill side in front of the hospital in December 1854, and their position there in providing for the daily wants of an army laid in place gathering down quickly & thousands on the subject much credit has been given to the medical staff on paper but the authors would have found it difficult to realize had they been tested in the Crimea in the winter of 1854-5.

During the month of October 1854 the weather continued clear, fine, and all the siege operations improved on additional amount of force on the town they enjoyed better health than they had done for the two preceding months. All were animated with hope, as it had been confidently predicted that the place must fall in 3, or 4 days, a well known name in the suburbs, after the batteries opened & every one looked forward with impatience to the speedy consummation of this grand object of the Expedition. The failure of the "did not shake the long and reputation of many," but it gave rise to serious reflections in the minds of those

to be as one. Shortly before, our dream. We then
would have to transfer in front of the school, and
carry on siege operations.

The ground occupied by the English
Army in front of the school, situated from the height
of the mountain on the right to the pocket house cavern
on the left. It was elevated, and dry, and had
a Southern aspect. The sloping ground was simple,
and good, and in a Southern front of view nothing
could well be used against the trench, also it
subsequently became the theatre of much heavy
fighting, and eventually from this center.
The ground where the camp was situated, was
protected by the crest of the plateau from
which the ground sloped down towards the river,
and was intersected with deep ravines running
in the same direction, which were the natural
divides of the higher ground.

The Divisions were encamped in the
following order viz:

The 2^d on the Southern slope of the mountain height.

The Light on the left of the 2^d extending to the Wagon
road. In rear of the Light Division the
Brigade of Guards; and, until the beginning of
December, the Brigade of Light Cavalry which
was moved up there shortly after the battle of
Abulaha. On the Wagon road to the left of the
Light Division the heavy Brigade was encamped at
the beginning of the siege, but when the winter set
in it was removed to a sheltered ravine in
rear of the 3^d Division - the common name of the
pocket house cavern.

The 4th Division was on the left of the
Wagon road; and on higher ground overlooking

the hill, and the back yard barracks, was the
5th Division, which extended to the pocket house
cavern, & joined the French line.

Between the 2^d & Light Divisions,
on the right, was the camp of the right flank
of the artillery & the 1st Division; and between
the 2^d & 3^d Divisions were situated here the left
flank. The batteries of artillery attached to Divisions
were encamped with their respective Divisions in
front.

Ladakhai, & the Eastern heights of Dalakhan
were occupied by the Highland Brigade, and a
battalion of Grenadiers; and on the plain in front
of Ladakhai was stationed the Division of Cavalry
on the point machine; but after the battle of Dalakhan
it was moved up to the plateau near the
cavern, and at the beginning of December at both spots
there was a sheltered valley near Ladakhai where
it remained until January removed from the
cavern. One troop of horse artillery was also quartered
on the Ladakhai valley, as well as a battery of artillery,
and a 2^d Troop of horse artillery camped in the
valley close to Dalakhan.

At the beginning of the Siege of Ladakhai
which was moved from the plateau in front of the school
house to the Western heights of Dalakhan, and the
2^d Division which changed its position from the
Ladakhan heights to the ground on the Wagon road
and eventually occupied by the heavy Brigade.
The Army occupied these positions during the
whole of the winter of 1825-6. Some months
before that a detachment of Grenadiers was encamped
in front of the Light Division, and suffered much
from Ladakhai in the course of the early

part of the works, as did the whole Army in front.
Soon after the Army had taken up
its position, and commenced siege works
two redoubts were built on conical hills about
a mile and a half in front of Kadikoi, which
were armed with heavy guns, and occupied
by Turks: But on the 25th of October the English
advanced in force, and captured the works with
ease. They then advanced on Kadikoi, and
the garrison, but disastrous cavalry engagements
of Balaklava ensued. In which 12 officers,
and 100 men were killed; and 25 officers, & 211
men wounded: 2 officers, & 55 were returned
imprisoned making a total of 308 casualties out of
a force of 2,139 men.

The wounded were sent to the
and brought in either to the general hospital at
Balaklava, or to their own regimental hospitals. Landing
On this occasion 12 ambulance waggonettes which Balaklava
had arrived on the 12th of the month were first
brought into operation, and did good & efficient
service, which made us regret the more that
we had not been supplied with a sufficient
number of them at the battle of the Alma on the
22nd of September, and on the line of march from
Old Fort to Balaklava.

On the 26th the Enemy made a
last attempt on Sebastopol on the night gone had
at Inkerman with about 4000 men, which was
gloriously repulsed by the Army here with the 2^d
Division. The loss on this affair was 11 men killed,
and 7 officers, & 85 men wounded.

The effect of these two days
operations, and the circumstances of the operations

having established themselves on the captured
detachable in front of Kadikoi was to create a feeling
of apprehension, & of course, in the minds of those
in command, as the Cavalry Division, which had
been so bravely handled on the 25th, was now
scattered, and finally on the plateau, which was
now defended by a battery, & breastwork along the
crest overlooking the Balaklava defiles, and others
were given for the medical and commissariat.
Thus the post was indeed strong, as far as it could
and the sick and wounded were shipped off for
Lisbon at once.

This sudden breaking up of your Hospital
Establishment occasioned great inconvenience,
without, so far as the committee could judge, any
good, & sufficient reason for so hasty a movement;
for the order to evacuate the hospital at Balaklava,
and ship the sick, was given to the Hospital authorities
on the spot, by an officer of the Domestic General
Department sent down for the purpose, & not by
the head of the Medical Department of the Army.
This mode of proceeding indicated either great
ignorance, or an unusual mode of conducting
public business; for the P. M. O. who was held
accountable for the condition of the hospitals,
ought, one would have thought, to have been
thoroughly acquainted at once with so important
an alteration in his arrangements. But this
is not a solitary instance of medical arrange-
ments being interfered with by irresponsible
parties: and at one time, when the current of
public opinion ran strongly against the War
Department, every one thought it a feat in
his cap to have a complaint the Doctors to say

in hand &c. Some of these were bold, and audacious, others amusing & contemptible, but they all tended to keep the common mind in chafe, & in a state of irritation; and our late accusations & published severe censures in general orders, which, I think, should be made to show, when I come to speak of the circumstances, were extremely harsh, & in a great measure uncalled for.

As examples of the kind of complaints that were carried about to him, independently of those which reached him in private letters from the pseudo-patients, that I learned about the hospital's absences; and in a slighter form from the same authorities during my residence here & there. The day before the testimony just assent made of the relation, on the 18th June 1852, all other arrangements being so complete, an item of work went down to the passengers in the *Palaklaan* to inquire if there were any persons left, and probably some found a report, the circumstance, and when sent for by the hospital, and asked the question. My answer was that I did not know, but, at all events, it was a matter which I would as we had plenty in the absence, and they could easily be obtained if required, as I had had by sending the hospital that he could not be cut for natural log, and clap on a wooden substitute at once. He smiled, and of course did not have the matter ended.

At the Battle of Inkerman some one wrote to the French authorities for the benefit of Lord & Wondage and the following day

When Lord Napier learned of the result of the evidence on the part of the French authorities, he reported that they could not make out the evidence relating to it, and in consequence of their own party. He sent for me and asked why such a demand of the French had been made on the French authorities without his knowledge and sanction, and I told him that so far as I was concerned the application had neither been made by me, nor with my knowledge, nor was the fact also known for immediately the action commenced. I explained the matter to the French with medical reports & the other with surgical materials to the cause of action, and they were stationed on the bridge head in the tent of the field. That was done that at the head of the field, he had abundance of everything on hand, and thought it might be well to have to disclose the author of so politic a transaction. So had the French been in a condition to afford us assistance, it would have gone forth to the field as another instance of arrangement in the medical Department. Whether his Lordship has discovered the author of this false transaction I never heard. He is another specimen of the kind of man in the hospital, known to the French newspapers (but I believe without his authority) stating that Lord & Wondage were still in the field at Inkerman and trusting charitable persons to send their contributions to a house in Paris, Paris Lane, which had been named when this affair, Lord Napier told me for an explanation and was made

from returned in my possession to inform him
that at the very time the letter had ~~been~~^{been}
in the Treasury there were 900 old linen sheets
and 3750 pounds of Linen in store at St. Andrew's
The question of old Linen was an absurdity
from the beginning and provided we disposed
thereof from the best feelings denuded themselves
of that which perhaps they required themselves
and sent these contributions of old Linen
to rot in the stores at St. Andrew's. Household
Wards Many of the packages had never been
opened, and the value of the new quantities
remained in store for which I understood
only 70 a Ton had offered as old bags for
paper stuff. This was one of the delusions
of the day; but there were others of a more
expensive nature, which the Govt had to
pay for, without contribution materially
to the efficiency of the Publical Dept.

On the 3rd November 1756, the ^{British} Army
took advantage of a foggy day to attack ^{the} ~~the~~
the light of the English lines again, with a
force of about 5000 men which was
defeated by Devo Bickish in the first instance
and about an equal number of French who
came to their assistance about time in the
night and after a desperate fight which
had almost to have the Battle of Sakerman
had been with a loss on the part of the British
of 43 officers & 500 men killed and 100 officers &
1770 men wounded & 10000 men & 62 men returned
as missing making a total of 2570 casualties
or 52 per cent of the force engaged.

On this occasion the Ambulance

Ambulance ^{Spain} ~~did~~ ^{did} good service and the wounded were
all collected, nursed & under cover at an early
hour in the night and many were taken to ship
off the greater part of them in the course of a
few days to the Genl Hospital at Cadix.

After the Battle of Sakerman the
supplanted French Ambulance was forced on the
C. in chief's mind that the Army sh^d have to wait
in the winter. Very bad indeed because I was
dear to this day tell where the Army had
to Winter & where it sh^d be proper for me
to make preparations for the sick & wounded.

It has been strongly urged by those who
reported after the transactions had taken place
whether nearly all the difficulties had been
succeeded, that these in office in the
winter at the time ought to have seen this
and ordered that and not having accomplished
all that they perhaps wished, & understood to
accomplish, was a proof of incapacity and want
of foresight on their part, and that affairs
might & ought to have been managed much better.

To understand the difficulties such as the British
Army had to encounter in the winter during
the winter of 1754, is like a man being born
& despising the dangers and hardships of War
when sitting by his own comfortable fire-side at
home and it is to be regretted that those who
were so desparagingly of the abilities of others
had not had an opportunity afforded them
of testing their own former superior adminis-
trative talents. Had they made the Army
they would in all probability have been more
guarded & exact in their comments on
others.

invariable result of such a state of things
could easily be predicted, and it was
possibly pointed out to the Commanders in
Chief at an early period of the war.
But Sir Lordship did not wish the remedy
put, and on one occasion he wrote for
his usual equanimity, as he desired the report
journal to inform me that had transfered
of the question of the food in adjoining to it;
and on my pointing out to General Balfour
the miserable condition the Army was in
his reply was Lord Balfour knows that a war
as you do; but it is a question of either
abandoning the Siege altogether, or carrying
it on at a certain sacrifice of human
lives, and this I believe to have been the real
position in which the authorities were placed,
for two more kinds, and humane than the
first, second, and Lord Balfour never wrote

During part of November, and all
December 1854, and part of January 1855,
the condition of the sick in the field hospital
was very deplorable, partly from want of proper
shelter, which could not be remedied until
the wooden huts arrived, and partly from
difficulty of getting what there were
conveyed to the front of the transport side
lines; for it would be impossible to open
the articles were always wanting on the ground
There in Balaklava when reports were so
by Regiments of Medical Officers in front, as
it was discovered on more occasions than
one when these complaints were inquired
into that they had reference to the Divisional
this

above, and to the Principal Medical Officers
of Divisions. It can not, however, be denied
that there were occasional wants of certain
articles of both medicine, and medical comforts,
which could not be replaced immediately,
either by purchase or the spot, or demand
on the Stores at Balaklava, and it is a curious
feature in the transactions of the Crimean
War how such deficiencies were discovered
in certain quarters, and how immediate, &
general the demand for the deficient articles
became. I believe was taken of this, probably
was helpful help by the Surgeons when they had
a superabundance of any article they wished
to get rid of, as they knew by experience that
if absent were given that the article was either
expended or running low it would soon be
demanded by many. Many articles, and
suggested amount of goods, and deficiencies
got into circulation, and amongst the rest has
been the following since my return to England
in a book published by Mr. Sturges, the Times
Correspondent in the Crimea: "There is a fact
just about the head of the Medical Department,
& change in a fortnight. I returned on the 15th
about Balaklava, where about 2000 out of
2000 men has been applying to the authorities
in the town for the last three weeks for medicines,
all simple and spiritual, and cannot get one
of them. The list he sent me was returned
with the observation: 'We have none of these medicines
sent here.' To-day this poor Surgeon too, came down
with his last appeal: 'Do, Sir, if you, give me any
the medicine you have for diarrhoea. We haven't any

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anything you have I'll take - "We haven't any."
Have you any medicine for fever you had a
good? anything you can let me have I'll take.
We haven't any - Have a good remedy case
of inflammation among my men, can you
let me have any medicine for them? We haven't
any - Thus for fever, diarrhoea, rheumatism
the three most prevalent complaints in the
Army there were no specific medicines -
and the Surgeon substituted of the whole side
with the latter explanation that he could give
no relief to the unfortunate men under his
care - Can any one of these facts show
that it be denied? certainly not by any one
who regards the truth, and who is not a
shameless advocate of falsehoods.

Dr. Sargant's opinion as fact that what
was told to him, and challenges a denial,
which may be safely given to the Surgeon's tale,
which bears an absurdity on the face of it. In the
first place Medical Officers don't in general
make denials in such indefinite terms,
nor do they trust to the judgment of the Surgeon
to say what is fit for the treatment of this, or
that particular form of disease, and in the
next place I deny the statement in toto,
and pronounce the Surgeon's story, whoever
he may be, to be a wilful fabrication, or distortion
of all truth - because whatever heat of opinion
and other articles there might have been, the ones
were never in the condition here represented; besides
which, all the legitimate Medicines chests of
the Army arrived on Balaklava at the end
of December 1854, and in the course of January

supplies were received from Sargant's chest
7, 410⁰, in addition to those that arrived
in December. So that there must have been
a great provision of goods taken by the other
Surgeon, or the Surgeon.

In Dr. Alexander's evidence
before the Select Committee on the
statement made that he received one
ounce of powdered Opium, and 4⁰⁰ of Double
extra 4 December 1854, and then followed some
reflections, copied from a private Memorandum
book, on the proposition that would be for each
Sark man in the Division - assuming of course
and Sargant's principle, that each did not
require one particular plan of treatment, and
let none of the Medical Officers of the Division
had a partial opinion of the Medicines sub-
mitted in their possession.

It is true we were much pressed
for Opium in Balaklava at the time alluded
to by Dr. Alexander, owing to the causes that have
already been mentioned; but he forgets, or suppresses,
did not mind to say when the Opium of his one
ounce statement by taking the Memorandum
that on the 12th of December he received four ounces
of powdered Opium, and on the 9th of the same
month four ounces more, making, both together
roughly a total of two pounds, nine ounces of that
drug which was issued to the Select Division
during the quarter ending 31st December 1854;
besides 14 pounds six ounces of Laudanum;
14 pounds 5⁰⁰ ounces of Dover's powder; 3 lbs 8⁰⁰ of
blue pill, + 2 lbs 4⁰⁰ of calomel with other
articles in proportion as will be seen

by the assumed abolition of gipsies from the general store & the right of removal during the quarters ending 30th September, & 30th Decr 1854, & 31st March 1855, which is exclusive of the requisitioned medicine chest, and Field Carriers that were at every opportunity at the commencement of the Campaign. This is, perhaps, the best, and most authentic mode of meeting the reiterated complaints of total want of medicines during the period of scarcity; and it is unnecessary to pursue a dry and cold march because of the fact the supply was nearly exhausted both in quantity, and diversity, and the general store system, that is opposed to these remarks, will, I think, be considered a curiosity by any one who is conversant with army economy.

In like manner the complaints of want of general comforts, and appliances, which were so incessantly circulated until he had met by a similar letter of complaint, & papers in the general store at Bullock, as taken care from the Light Division in particular. But liberal as these subsequently became they were scarcely sufficient to meet the extraordinary demands that were made by regimental staff officers, and sanctioned by the Medical Officers of Division. I give an abstract of these requisitions in the Light Division for the month of November 1855 as a explanation of what Duran, and May state that at that time there was little or no stock in camp, and no place to store for accumulating such quantities of medical comforts, which must have been washed had the army removed. Indeed

Letter of May
of medicine
to Duran
from Light Div
31st March 1855
p. 11

General Store
of medicine
from
June 1854 to
March 1855
p. 12

Return of
Hospital
of
Light Div
Novr 1855

Return of
the Camp
of the Light
Div
25th Novr

order to march, & any nothing of the constant supplies such quantities of gun, spirits, and small liquor must have been & the hospital attendants in camp when the want of plenty were sent

as I have already stated the hospitals in the Annex at the commencement of the month of 1854-5 were found generally comfortable, & quiet, which are deplored, and none more sincerely & warmly believe, than the Medical Officers themselves, altho they were essentially devoid of sympathy, and a wish to get the sick away out of their sight. But prompt, and energetic measures were taken to remedy the evil, which want of time, & proper information had created, and early in the spring of 1855 they were placed under a footing as the field hospitals of an army, & may safely say, were even placed before. It was the fashion to sneer over hospitals, and mode of management, and contrast them with those of the French Army; but at the worst of times the French hospitals in the Annex were never much better off than our own, with the exception of their ambulance companies, which they had wisely brought into them, and latterly they were very far superior in every respect, and this their own Medical Officers publicly acknowledged, and they were anxious to adopt our improved system of hospital management, which they considered far superior to their own in many particulars.

At length the equipment of some field hospitals in the Annex appeared the details, and appearance of these of good stations, which was clearly out of place, as it must necessarily have been left behind on the breaking up of the camp, for it would be preposterous to suppose that such a

a quantity of baggage could be carried
on the line of march with an Army.

Good hospitals, I think, ought to
contain every comfort, & convenience necessary
for the proper, and effectual treatment of the
sick; but even here, I consider, efforts were
made to introduce refinements, not pertinent
to the cure of disease, and brought the habits
of soldiers, such as smoking, wearing glasses,
hair, tooth brushes, and Spring ^{toilet} Chains
covered with porous matter, which contribute
certainly to comfort, & personal ease; and
some articles are pleasant to the palate; but
Liquors, & tender meats, being articles of
more refinement, however, may justly be
considered as not only unnecessary, but
decidedly detrimental to the soldiers morale.

It may appear an easy matter
to those who have never tried the experiment
to organize and keep complete one hundred
separate hospital establishments; and there is no
great art, or difficulty, in either organizing demands,
or denouncing complaints; but it is quite a
different affair to find supplies to meet such demands,
when an Army is situated as the British Army
was at the commencement of the month of 1785,
and no one can comprehend the difficulties that
then existed, but those who were present, and
experienced them.

The Army was inconsiderably
landed in the winter, and ordered to undertake
the ordinary, and perilsous duties of a winter
campaign without either magazines or stores,
or reserves of men, hence all the difficulties,

and sufferings which were experienced during
the winter part of the winter. Logistical efforts
were made by the home authorities to remedy
the mistakes that had been made; and every
effort on the spot & winter business to the utmost
of his ability; but supplies for a large Army
cannot be collected in a moment, where
the country itself produces nothing, nor can
magazines be formed without previous knowledge
of what is likely to be required, and this, so far
as the Medical department is concerned,
was withheld from the Principal Medical
Officers by the Military authorities.

Legitimately the elements were against
the enterprise, and a large supply of stores was
lost in the hurricane of the 16th November.
Stores on shore could not be obtained for them
but subsequently arrived, and most of the spot
rendered it almost impossible to get them to the
front. These difficulties were overlooked by
those who commented so freely on the conduct
of the administrative officers in the winter, and
to read their observations one would think
that the officers were not only incapable, but
that they had been content to sit down at
their ease without making one single effort
to remedy the misery around them.
But as cases of Officers, I can speak from experience,
labour hard, or suffer more severely than
they did. So far as my own duties were concerned
I had to be out nearly all day, wet, or dry, and
was compelled to work the greater part of the night
in a small tent, without either stove, or fire
could I frequently become so benumbed with

could not be made to search for the time, or
was conscious that he had any but or not
seen the forgetfulness of which was done one
or two hours when I went into bed in the British
Cantonment. Some constitutions could bear
withstand the continued heat, and usually
and more took down to bed at a like
rate; but I myself was obliged to do so,
and was one of the few who could say that I was
never absent from duty for a single day,
from the time I joined the army at Fort St. Philip
in June 1854 until I embarked for England
in July 1855.

At the beginning of the winter of
1854-5 every effort was made to obtain accom-
modation for the sick in the Division, in addition
to the barracks, and the tents which the Regt.
were in possession of. Some time, and labor,
in a cultivated ground called Sarani, about a
mile and a half in rear of the British Camp,
which the commissariat had been possessed
of for their mules, and drivers were applied
for by me on the 16th instant for the sick; but
Mr. Fuller, Commissary General, made a strong
remonstrance to the application, stating that if
the mules were deprived of the shelter they would
die, and a preference was given to them,
and their drivers, over the sick soldiers; but
even this preference did not save the mules
from destruction, as the greater part of them
died shortly after the instant mentioned
in

application was then made to have that
for the sick treated similar to those used by

the Turks, and Russians, but neither labor to
dig the ground, nor timber being in the
vicinity could be obtained so the project
had to be abandoned; as the 1st ship load of
timber had not arrived from Europe, I was
informed, was, by Lord Dalhousie's order, to be
appropriated for the shelter of the cavalry horses.

1854-55
20th Nov 1854
I had applied to have all the remaining
houses in Dalhousie, & had been given up
for the accommodation of the sick. At that time
the Chapel & two small houses were handed over
for the use of the sick of the Highland Brigade.
But in Dalhousie every house, with the
exception of Lord Dalhousie's was filled with
soldiers, & the sick army. It then the only
workshop in Dalhousie here was a
building at the public school ready to be used
in, which I was anxious to get done at once
to hold our hospital accommodations, but
as the material was all on the spot, I was
never able to accomplish it until the month
of January when Lord Dalhousie having paid
a visit to the hospital his attention was drawn
to the subject, and he ordered it to be done
immediately. Thus showing that no real diffi-
culty existed in effecting that which so many
wishes, and broken applications had failed to
accomplish.

Finding that there was difficulty
in obtaining accommodation on shore for the
sick, I applied on the 24th inst. to have a large
transport called the "Indigo Queen", which had
been damaged in the storm of the 10th inst., chartered
for her wreck, moored near the shore, and covered

was carried into effect by the agent of hospitals, but had other accommodation was appropriated for the use of the Royal Marines, which was far enough, as a habitation of them was serving the shore at the time.

Undoubtedly the wooden huts erected application was made to have ten erected in the neighbourhood of the general hospital at Bahallara, and an equal number on a plateau near the old Genoese castle at the entrance of the harbour. The latter establishment was subsequently increased until it was able to accommodate 500 men. It was opened in March, and appropriated solely for wounded men; and the success of the surgical treatment there was something surprising, as will be seen on reference to the special report of the Surgeon of the War. A second general hospital was opened in camp in rear of the St. Demetrius, and was ready for the reception of patients in April. This establishment was capable of accommodating 300 patients, and was found very useful during the large operations, but the success in this hospital was not equal to that in the other hospital, which shows the advantage of pure air as an adjunct in the treatment of the outside and disease. During the summer a Convalescent Hospital was erected on the high ground near St. George's Monastery, and answered remarkably well. It was appropriated at first for the reception of convalescents from Tener, and when there had in a measure disappeared from camp it was converted into an English Marine Hospital.

During the spring of 1853, when huts were entertained about hospital accommodation, and the means of promoting wounded in case of any sudden emergency, four hospitals were fitted up ready to receive 100 patients each. Two of these huts were subsequently employed on the expeditions to Arlic, and to the interior, but in Bahallara Harbour we never had more than ten.

"Saint"
"St. Michel"
"St. John"
"St. Peter"

In addition to the general hospital accommodation above mentioned, immediate measures were taken to purchase such requisites, tools, and bedding, into wooden huts for the sick, and great efforts were made to get them up the point as soon as possible. Early in the spring this was accomplished, and they were equipped, and provided in every respect in a way that left nothing to be desired. Equally active measures were taken to provide tools, & medical comforts, and when it was found that the punctuality of the Store Department at Bahallara could not be depended on, I obtained Lord Dalrymple's permission to purchase, and provide for ourselves on the spot, and from that time forward our difficulties ceased. Large shipments were made on speculation to Bahallara by private individuals, and it was found we could purchase supplies there cheaper than they could be obtained at Constantinople; and to ensure an ample supply of good cloth, I have since instructed the ^{2d} Surgeon in Chief, an able and intelligent officer to write to the General at Oporto for 20,000 of cloth, which he stipulated of the best quality, and at the moderate cost of 1/9^{ths} ad valorem to be paid; and to the commissariat

at a lower rate for supply, from whom we would
certainly obtain some at a moderate price.
The demand for medical comforts in the
Army was very great during the first
winter, when the men were in such a state
of debilitation; and the Chief Surgeon at States
did not deem it desirable either the extent of
our wants, or the peculiar position in which
we were placed, and it was not until we
were in a measure independent of him that
we felt at ease.

After Mr Spilston's visit to London, &
the limits the necessities of the Service were
better understood, and more comprehensive
views of the subject were taken; and when
Mr Lubbock assumed charge of the Ordnance
Department, as Surgeon in Chief he acted
liberally on the information that had been
excited, and made his demand on a
scale calculated to meet almost any contingency
and during his administration such other
visions as Lord Townshend of the quantity
they ask for were heard of none. In particular
it may fairly be pleaded, that officers, who
had all their lives been kept within the narrowest
bounds of economy could not direct their
minds to fuller consequences, & responsibilities
in rushing all at once into an amount
of expenditure, which appeared to them to be
excessive; but which, from peculiar circumstances,
had become absolutely necessary; for when an
Army in the field begins to count its sick by
thousands expense for medical comforts is a
secondary consideration. It may be argued

but this kind of liberal supply leads to waste, & abuse
in the administration of the hospitals, which is true
to a certain extent; but it is better to run the risk of
this, than that the sick should at any time be in
want of useful comforts.

The Home government was liberal
to a degree, and every effort was made to meet
promptly all demands that were made; and it
must be admitted if the war was commenced
on a scale of full paid pecuniary aid from
want of experience, it was amply atoned for by
Subsequent liberality, and there no hesitation
in saying that the result of that liberality was
true economy in the end. It does not answer
any good purpose to denounce narrowly many
wasteful expenses that were incurred in the course
of the war; but the practical experience then obtained
will enable the government either clear of them
on all future occasions, without lessening the efficacy
of the Medical Department. Indeed the bravest
officers that were incurred and killed, or in
relation to the real wants, and indeed in no
appreciable measure the labors of the Army Medical
Officers, who bore the heat and burden of the day
and those who came in at the stroke hour
ranked the most substantial rewards.

Hospital Ships —

This was a source of great annoyance and
distraction for the first three or four months.
And it would require a volume to detail the
difficulties that were met with under this head
and the correspondence that took place between
them; but with the Department Services
that hardly need be mentioned for this study

Should I may be permitted to state the precise grounds on which these measures were proposed & of other their extent of their occurrence the reader is of opinion they were justified we must have faith in the general sense of the army & the feelings on the subject. It is very true I imagine who saw a whole Regiment distinguished in such orders for the fault of the individual, and the names of that individual read perfectly well known; I heard of it being condensed to Company with the Commander in Chief's own order issued to the Adjutant General's Department.

Before the Army left India as has mentioned before I spoke to Lord Napier about the necessity of having Hospital Ships fitted up & the "Rudee" & "Cumbria" Steamers were named for the purpose by Admiral Boscawen but they were filled with troops & baggage at India & their appropriations as Hospital Ships lost sight of. From Soolah Bay the sick were sent down to Soolah in the Company Steamer & sailing Transport Dundee by order of the principal Agent of Transports. The "Cumbria" received the men that were taken sick during the year & the Army remained at the Fort several weeks that were wounded & taken sick at Bangalore, & her complement was filled up after the battle of the Alma. The "Rudee" & "Cumbria" Steamers "and the "Seymour" & "Athens" the great sailing transport embarked wounded also after the Alma and the "Adriatic" "Tromador" & "Comorian" sailing ships

left the Bazaar with sick for Sootah before the end of Sept. 1854.

Between the 1st 10th & 31st December 1854 forty one boxes of one kind or another were despatched from the Bazaar to Sootah with sick & wounded on board. Comprising 8167 British & 202 Russians of whom 5 officers & 392 men died on the passage home - All these ships had to be separately fitted up with fresh provisions & found more necessary, bottled stores at Calcutta; and as further stores were officers found their way back to the Bazaar the difficulty of getting to be stored the difficulties went on increasing and there were accumulated as well as the contents of the sick & wounded, abridged by the want of transports appropriating for their reception every vessel that might casually be in port at the time, and these were frequently small & ill adapted for the service, but as there had not to be fitted up at Sootah among some 2000 both of stores & medical officers in an unprofitable manner. Not only had the vessels so told off to be fitted up but that had frequently to be done at a few hours notice and it occasionally happened when they had been so prepared the Agent of Transports changed their destination which created great inconvenience & confusion and complaints reached the C-in-Chief which he directed with his honest candour and I was compelled at last

To assist our Steamers being spending all spent for this duty, which was eventually carried out in a satisfactory manner; but in the first instance the agent of transports carried two of the smallest Steamers in the fleet, and thus under the necessity of representing the inadequacy of these two vessels to relieve the hospital in the Crimea from the fast accumulating number of sick, and two others were subsequently added.

Letter 4 Dec 1854
 Letter of 6-11-54
 Dec 1854

To prevent a change of the situation of complaint the following equipment was put on board for each 100 men embarked

- | | |
|---|-------------------|
| 100 Pullies | 6 Water Buckets |
| 100 Pillows | 4 Tubs |
| 100 Blankets <small>(By sea and land are Blankets, & Blankets, & subsequently supplied)</small> | 1000 gals of wine |
| 100 Bags | 2000 bottles |
| 6 Bed Pans | 2000 pots |
| 1 Bed Pan | 10 Sea water tubs |
| 6 Urinals | 4 Patient beds |
| 6 Washhand basins | 4 Brooms |
| 20 Chamber Pots | 2 Crutches |
| 100 Tin Plates | 4 Scrapers |
| 100 Point Drinking Cups | 10 Knives |

Medicines &c

One Regimental Medicine Chest, with such additional articles of medicine as the Medical Officer may demand -

The case of Surgical Instruments, & other property, and the Officers own pocket case, should be that he is required by regulation to have in his possession. Additional supplies of Surgical materials to be put on board when wounded are embarked.

Medical comforts

- | | |
|---------------------|--------------------------|
| 2 doz Port Wine | 20 lbs condensed |
| 2 doz Brandy | 200 lbs Sea Meat or pick |
| 20 lbs Arrowroot | 20 lbs Pickled Cucumbers |
| 40 lbs Sugar | 5 lbs of Onions |
| 100 lbs Tea | 1 case glass Bottles |
| 50 Tins Broth | 20 lbs glass jars |
| 50 lbs of Soap | 10 lbs of Limes |
| 100 lbs of Jam | 10 lbs of Raisins |
| 20 lbs Pickled Pork | 20 lbs of Pickled Onions |

A permanent staff of medical officers, & orderlies was appointed to each ship, and the following general instructions were issued to each on taking charge:

"Medical officers embarked will pay particular attention to the cleanliness, ventilation, and fumigation of their respective ships. They will see that the sick are as comfortably accommodated as circumstances will permit, that their food is of good quality, and properly cooked, and they will also see that the men receive any medical comforts that may be ordered for them -

A return of the comforts put on board will be given to each medical officer on charge, & he will make broken demands on the Storeship of the vessel for what he requires, so that at the termination of the voyage he may be able to account correctly for the expenditure of the same to the Port or Admiralty, who will give directions about the disposal of the remainder.

In like manner lists of the Medicines, Instruments, & Surgical Appliances will be furnished them. The medical officers will make out a nominal roll of the men embarked, in which

bring out the name, age, sex, number, and disease of each man, and this done hand over to the P.M.O. at Suva on his landing, accompanied by his own observations on the cases during the voyage.

To derive the greatest amount, and most regular abundance of the orders issued, & assist the sick, he made them into three batches, so that each may always have food when required by the sick.

The sick ships were regularly filled up with standing berths, and provision was made for a regular supply of fresh bread for the sick by paying the ship's baker sixpence a day for the cost of baking it.

After this system was adopted no complaints were made, but before that there were many, and from the hurried way in which the sick were embarked it was utterly impossible to make sufficient preparation for their comfort, and as this was generally dependent on circumstances over which the Medical Department had no control it was unfair to fix on it as a scape goat for all the ills of confinement of the whole army; but no sooner was it discovered that such was the case than there was no lack of resources, and unfair advantage was taken of the difficulties in which the Doctors were placed to make capital of them in high quarters.

To show how the Medical Department was prepared for time in the embarkation of sick, & what unfair advantage was taken of their position I may be allowed to mention the following instances.

On the 9th of October 1874, I, Surgeon Principal Medical Officer in the absence of the Surgeon, received orders, that the adjacent general department ship off on the 10th of October from Camp to the following day. He immediately rode round the Staff Surgeons to communicate with the Principal Medical Officer, and then went down to Dalakona to make arrangements with the Surgeon, Senior Medical Officer there. The Senior Medical Officer, I find, had gone on board ship to dine & sleep about leaving word where he was to be found, so that I, Surgeon, had no opportunity of communicating with him personally, and he left a message with 2^d Class Staff Surgeon Macleod to be delivered when he returned to his quarters. Macleod said he would do all in his power to find I, Surgeon, but was unsuccessful as the latter did not come on shore until late the following week, the 16th. In the mean time the sick had been dispatched from Camp, and arrived in Dalakona where berths were ready to embark them on board the ships appointed for their reception, and some considerable delay took place before it was accomplished. Lord Lygon, and the Surgeon were in Dalakona, & I, Surgeon, was present, this disturbing scene, and I, Surgeon, in place of performing the duties concerned, announced on the whole Medical Department in general orders, which was an unjust, as it was uncalled for; but why the sick should have remained hours on the shore of the delay, as stated in the order, with himself and the Surgeon on the spot is stronger still; because it is the special duty of the Surgeon's Department to provide emergency of the kind that was wanted, and not that of the

Medical Department, in which the duty had been suspended, and provided it was considered. His Lordship must have felt this, as in the very order that concerned the Medical Department he directs an Officer of the Army's Department from each division to accompany all convoys of sick in future, and provide for their reception and embarkation.

On the 13th of December a second General Order was issued concerning the Medical Department in the case of the "Acon" Steamer, and, I think, all impartial readers will say, with as little justice as on the former occasion. The "Acon" Steamer had been damaged in the hurricane of the 1st of Nov. 1854, & on the 17th of the same month she was taken up by the agent of Liverpool for the reception of sick & wounded men, and was impounded on that day by S. T. J. at St. Helena in the usual manner, and the following report was forwarded me by him of her equipment, and accounts taken

On board "Acon"

25 Beds

1200 Blankets & Blankets

700 lbs of Sugar Government Property

Medical comforts to be had on board on requisition

Rice

Soap

Iron or Lead

Spence of Beef

Baited Beef

Private property, and of all a liberal supply.

Nov 27th 1854

Sign'd S. C. S. T. J.

The "Acon" to be provided with as little delay as possible in the usual proportion for 350 -
Sign'd S. T. J.

Stand on board by Surgeon accordingly. The above on the 17th of Dec 1854

Eight 2000 of Port Wine

100 Supper Pills for - 50 on the 17th of Dec 1854

The following is the detail given by the Steward of the private stores on board which were available for the Medical Service -

100 lbs of good quality

20 lbs of Arrow Root

50 lbs of Soap

116 Lbs of Spence of Beef

100 lbs of Rice

100 lbs of Sugar

150 lbs of Tea

424 lbs of Sugar

4 Bushels of Potatoes

24 Bibles of Port Wine

On the 21st of December the following articles were put on board the "Acon" by order of the Medical Officer of the Hospital -

Three 2000 of Port Wine

140 lbs of Rice

100 lbs of Sugar

270 gallons of Sherry Juice

6 additional Bibles, &

77 Drinking Cups -

An additional supply of medicines was put on board by the Medical Store Keeper, but, owing to the great demand there had been for them, only four had been carried on board for the "Acon" when she was first called up, but then the vessel had in her lower

Cabins, where the men were, the accommodations
quite clean, & by the aid of fish, & Biscuits, the
deficiency was compensated for as much as
possible.

Three medical officers were told off for
duty on board the seven vessels, and two others
were added afterwards, making five.

1st Surgeon Major J. Taylor, an English gentleman
Mills 58th Regt; &

2nd Surgeon Major

3rd Surgeon Major

4th Surgeon Major

The "Arctic" commenced sailing with 1000 men
on the 13th of September, and continued to pass until the
last of her departure probably on the 12th of December
when she had 18 officers, & 293 men on board.

The greater part of the sick sent on board, was
cases of Cholera, or Choleraic Diarrhea, but 22 of
them were wounded, and amongst them was a poor
man of the light brigade who had had one leg, and
part of the opposite foot, carried away by a cannon ball,
or piece of shell. Surgeons had unfortunately killed
him, & the man was in great pain, & pining,
and wretched; and appealing to every one around him
for relief. Amongst the visitors on board the "Arctic" on
the 2nd of December was a full officer of artillery whose
attention was drawn to this man's case, and on his
return to camp he went to Lord Bagenal's quarters and
reported that there was a poor wounded man on
board the seven steamers who had lost both his
legs, and was lying on the deck with nothing but a
plaster over him - that there was only one other
surgeon on board, a very young man, and that the
sick and wounded were neglected, and destitute

of nearly every comfort. The tale of horror
naturally shocked Sir Lord Bagenal, and made him
long to embark for the adjacent general hospital,
and desired him and one of his own to follow
morning, and enquire into the matter.

General Bagenal called at day break about
half past eleven to bid adieu to the Commodore, or
Chief Officer, and remarked how cruel it was
to leave a poor man in that state exposed on deck
for he, Sir Lord Bagenal, was under the impression
that the wounded man was sheltered by a tarpaulin
on the upper deck. Several times quite sure there
must be some mistake on the spot, as no one
could possibly be so inhuman as to leave an
unfortunate fellow creature in that condition
exposed on deck.

The following morning when we were
on board the "Arctic" we found the man plastered
on a stretcher in a good position between decks, but
still in great pain, and appealing to every one
for relief. He said he had been cryed out
and stretched him, and had done all in his power
to relieve him, but he was in such pain that
we could do nothing worse than to

Amongst the physicians on board the
"Arctic" was the learned number of military men
for abundance on his deck, but at the time in
accordance with the following circumstances
gave from the adjacent general hospital that
the Commodore at Delahoussaye would not
send him

General Bagenal, Lord Bagenal, 11 October 1854

Lord Bagenal, I think will be good enough
to embark soldiers from the provincial hospital.

the detail of a duty.

The Court commented on the want of drinking cups amongst the boat, but as every soldier on board is supposed to have a mug, and carry it with him, this defect was lamented, but there concluded by the Deputy Comm. They also noticed that the ship's officers did not know where the wind was on a certain quarter, which happened like the case to the Court last, and some took up some unbecoming fear for the Lord High's edification.

Some unbecoming & kind, had not Mr. a Captain's son, and the Times reporter were in Holbourn at the time there would have been no court of enquiry at all, or if there had, the Lord High's concern would have been lighter. I feel justified in making this remark from the Lord High's own observations on the subject at the time.

At a subsequent period when I attended the following day, I found

"There is a London. I believe his appointment to London is attended to in the house of Commons." What situation does he hold there?

Sent the following answer:

London is stationed at present, and doing duty under a temporary Deputy General of the 1st Division, who was sent down to London from Dalhousie in January, when a Force of 24th Depot, and 1000 was R.M.C. there, and on 2nd March being taken ill and compelled to return to England on account of his health at the recommendation of a Medical Board. He was succeeded to the charge in virtue of his rank

and seniority, and he held the position of a few weeks from his discharge on the 10th of the 10th Division, I must in justice to him say that he is not only a talented but a good officer, but his abruptness in the execution of his duty, his manner, and absolute care, which is greatly to be deplored, but which I believe should be rewarded by the oblige, which should have been as if he were the eldest of his line."

On the 12th of December 1874, the day before Lord High's departure from the "10th" an order was issued, directing a Board, composed of four officers of the General Staff Department, - the C.M.C. at Dalhousie, the Commandant of Holbourn, the Officer of the 20th Depot, and a Staff Officer, to examine all ships named for the expedition, and to report thereon the repairs of the same which might have been done, and the whole labor and expenditure of the ships, compared with the C.M.C. at Dalhousie. It is clear if the repairs were deemed necessary, when regularly furnished, they would have been demanded, and more in view of preparation, it ought to have been carried out with long delay, and the Medical Department is placed upon a responsibility, which has not properly belonged to, and for which it had never been deemed by the General Staff of the Army. Not only was the Medical Department saddled with this responsibility, but it was figured as the most important position for handling the duty, independently. For instance, a similar might be of 2nd March 1874, I received an intimation from the Deputy General, regarding

but the French would assist us with their Am-
bulance, on the Monday morning following,
and desiring that we should assist all the divisions of
the Army, and go down to Balaklava to make
arrangements for their embarkation. The dis-
tance had to be made, being nothing more distant
at the present camp, & Balaklava, to make
arrangements, could not have been left than
10 miles. But as we were in the humiliating
position of being compelled to ask aid from
our neighbours, we were obliged to accept of them
at whatever their convenience it might be.

On the 12th of Oct. Mr. Gordon Adam Esq^r
sent me a letter by Lewis Gilbert Esq^r, but which
I did not receive until the morning of the 13th
expressing wish to go down to Balaklava, and make
arrangements for the embarkation of 7000 sick on
the morning of the 14th, and that on my arrival
at Balaklava at ten o'clock I should be informed
of the names of the vessels that were to convey
them down to Scutari. At this season of the year
it was dark before five o'clock. Is that any one
conversant with such duties can readily imagine
the embarrassments that must necessarily have
been experienced in equipping ships at such
short notice from land, and making them
steer away in the hold of a ship, for at that time
we had no store houses on board. No wonder
therefore that a military court of enquiry found
ground for comment, and I should say, that
some important errors, & arrangements had
been as truthfully said, as those of not
more defects, and deficiencies would have
been discovered.

On the 25th of November the "Trent" left
Balaklava with 17 officers, 108 sick on board
and arrived at Scutari on the 27th without accident.

On board the "Trent", besides officers,
there were 20 non-commissioned officers, & private
going down to Scutari from the 14th of Nov.
The crew of the ship was heard more at night,
selected on purpose, because it was found
necessary, for want of service officers, to send
the rest down to Scutari in charge.

The commanding officer of the
"Trent" made a report to Sir John Hope but the
two young non-commissioned officers had no doubt seen
the crew, that the ship was insufficiently manned & one
man got to Scutari for their sake.

In the receipt of this report his Lordship
Wrote a strong Memorandum in which he very properly
enquired how the Surgeon of the 14th Regt. was
employed & what duties the Staff Surgeons had to
perform, but he unfortunately added that the sick
had been to be put off, that accomplished the Doctor's
report appears to have told little what he came of
them. In my reply to this Memorandum after
giving a copy of the Surgeon's report of the 14th of
Nov. 23rd November & a list of the stores put on
board of the use of the sick, and after stating the
nature & distribution of all the stores & medical officers
I made the following Remarks to his Lordship's
observations as well as to those of the Reporting
officer.

I observed first we heard such news
as he deemed sufficient to send a voyage
and the report from Scutari proved they
were sufficient.

That my sick soldiers should have been one day ^{hardly} without
any food is to be lamented, but
it is strange such an occurrence should have
taken place when all around him spoke his
own language & where he could so easily
have made his wants known - Besides
I understand there were about 30 Non Commissioned
officers, and privates on board in health,
going down to Scutari to join the depot there
There ought not therefore in my opinion, to
have been any difficulty or want in the Senior
officer of the 7th on board, taking the command
as laid down at page 537 of his Regulations
regulations, & seeing orders & regulations
established, if the 4th Surgeons were too
inexperienced to manage the Military part
of the arrangements. Indeed it would have
been better had a Military officer gone in
each ship as is ordered here, and as I believe
is customary on all such occasions.

It is an unavoidable rule to send a second
Clap Staff Surgeon down to Scutari in charge
of sick & wounded when there is one available,
and on four occasions where the number
of wounded was large 1st Clap Staff Surgeons
were put in charge -

When the Trent sailed with the
Regiment of St. Pancras who was in charge of
the Genl Hospital at Balabass there was no
second Clap Staff Surgeon present & the
appointment of Mr. James M. had been both
intelligent & talented young men in their
profession & a matter of necessity not
checked on the part of the Government - and

"at the time just we heard the Trent
"were selected & left they were considered
"quite capable of taking Medical Charge of
"them" and the result proved the contrary
"of the conclusion as to capability was
"reported on the passage down -

"in the midst of many difficulties & when
"that all are endeavoring to make the best
"of. Some friends to whom your Lordship
"thinks the Medical Dept. is indebted by to
"unwearied & unchristian & feeling & that having
"getting rid of the helpless & unfortunate beings under
"their care - I assure you no such satisfaction
"any member of the Medical Profession and
"Truly believe no class of human souls have
"exactly the present destitute & unprotected state of
"the sick of the army, than they do & some have
"made more sacrifices than they have done
"to alleviate their miseries."

On another occasion some one who
was, perhaps fond of setting the part of
philanthropist we heard a comfortable man
in Balabass harbor than attending to his
January practice in the trenches during the
heavy month of December 1854, addressed himself
to the Duke of Newcastle, at that time Secretary
of State for War, on the subject of the condition
of the sick on board ship in Balabass harbor
& the following extract of a Dispatch from
his Grace was sent to me on the 17th Jan 1855
1st copy

"It is stated that the first batch of
3,300 sick sent to Scutari on the 10th December
embarked on board the Sydney" and that

and that the poor creatures had to crawl
up the ship's side, as they could, without
a Medical officer on board to examine
them, or a single boat to assist them."

With reference to the annexed
extract, I beg to enclose a report from
1st Class Staff Surgeon J. Anderson, who
the principal Medical officer at Melbourne
at the period of this occurrence, in regard
the "Lydney Steamer" is reported to have taken
place, and I trust his answer will be considered
satisfactory by the Field Marshal's Commanding
in Chief.

J. Anderson's report dated 30th July 1855
I this day read on board the Lydney and
have heard the statement of the Capt^l & Chief
officers regarding the occurrence of the
1st December 1854. It regards that part of the
report which bears that the sick had to
crawl up. My state positively that it is
totally unfounded. That the gangway ladder
which they showed me, had the same, had
not been hoisted in for many months.

That those who were able to walk went on board
by this ladder & the others were carefully hoisted
on board by a grating, which was pointed
out to me. "Now the steps are as good
as those of any other first class Steamer,
having a rope rigged out along side to permit
ascendants, and as the Deck of the Lydney is a
conveniently short distance above the Water
I am disposed to think that the officers
of the Ship are quite right in their
opinion." I send you a copy of a

of a letter I wrote to you on the 11th December
last. The original I have seen & I think I should
hope will suffice to explain any apparent
neglect. I beg to state that I was only called by
orders conveyed to me by Captain Christie
not and I believe the Landing party a large
number of sick than had been announced
before had obliged Capt Christie to land the
sick on board a vessel unprepared for them.
I have to add that the sick were not more
than one hour on board before the arrival
of the Medical Officer.

Copy of letter of 11th December 54. alluded to
by J. Anderson.
I know on this, & by order of J. G. G. G.
a number of sick were here but on board
the Lydney & that had not been supplied
with provisions, with ordering Medical comforts
or stores. I have endeavored to meet the
difficulty by sending a Medical Officer
on board & shall be glad to increase his post as
I have to call your pointed
attention to the above circumstances, as the best
arrangements are rendered entirely void, & void
by and other

again in a Dispatch of the 11th Dec 1855-56
I am, Sir, your obedient servant,
J. Anderson, Surgeon

In answer to your letter it is stated that
the sick had to scramble down the ladder
to embark without a Medical Officer to assist
them on board, and without respect their
distress, other than that which they could
afford to bear. Such suffering, if it had been
in any measure it could have been prevented

under proper management.

He was referred to me on the 26th June 1855, and the following is my answer.

As such boarders allowed to be on board, and proceed to sea, without the medical aid, and facilities to obtain them.

I cannot, therefore, account for his statement. The only instance that I know of where such a result took place for a short period, without a medical attendant, occurred on the last part of December, when some sick boarders were brought down from the ship, the agent passengers, called some of the put on board the Sydney Steamer without the knowledge of the Surgeon, Mr. [?], & the Medical Officer of the [?], just immediately it was made known that the [?] had a medical officer on board the [?], who reached the vessel when unknown after the arrival of the [?].

"On the 21st Dec. had the honor to submit to Field Marshal Lord Raglan, a full report from Dr. Anderson of every particular connected with the transaction."

Even after a more explicit arrangement had been made about the transport, & that from the [?] to [?], it was thought advisable to have a military officer on board each vessel to maintain order, and discipline amongst the soldiers, and convalescents; but some of these gentlemen thought it best to put on board, and interfere in medical concerns

& the prejudice of the [?], and on the 6th of Dec. 1855. I have concluded to bring under the notice of the military authorities the complaint of [?] in charge of a vessel, who had been so undisciplined both in his professional duties. The military officer, as related to the [?] general, with other intentions, it was the [?] than judgment, then since on his own authority and administration it to the [?] on board, in the [?] state to their prejudice in some [?] without other [?], or mentioning the circumstances of the medical officer, who was held responsible for the care of the [?], and due administration of the [?] put on board for their use."

In acting thus, I stated, although the military officer had overstepped the limits of his position, and interfered in matters he could not understand, and with a rank below an authority to [?] - he also took upon himself, perhaps to [?] the public property, by ordering blankets, & other [?] on board, which could have been [?], and rendered [?] upon [?] the [?] at [?].

Impressed as the above conduct was the system [?] into medical concerns were shortly afterwards brought to a [?] by a [?] young [?], which [?] on board one of the [?], [?] to the [?] general that, in his opinion, the [?] of medicines put on board was inadequate - now as the supply had been

deceased, as reported by the 1st Lieut. Staff Surgeon who ordered it at Poulakka as before the report made, and had been found only sufficient by the 1st Lieut. Staff Surgeon, who inspected him on his arrival at Lintore it is fair to observe there was no objection to his young gentleman's comments, and when general Stewart showed me the report observed: "Doubtless his young squire was better judge of what was necessary than the two Staff Surgeons & his duty at work at the French matters, but the fact is general, every one nowadays thinks he is privileged, and it will be a feather in his cap to have a look at the Doctors, who are now at a discount his answer was: This kind of absurdity, I can much prefer as to be, and it was, for some that day never received any complaints. If they were made they were never forwarded home. But after the fitting up, & equipment of the four large Steamers, which were employed for the conveyance which a person must have been very particular indeed to find fault with the arrangements.

From the 1st of January to the 31st March 1855, 72 Opium, + 6284 men were taken down to the hospitals on the Porpoises, ^{with 10 Opium} of these 1 Opium, and 205 men died on the passage down.

From the 1st of April to the 30th June 1855 - 41 Opium, + 3193 men were transported to the hospitals on the Porpoises in 28 Opium of these 7 Opium died on the passage.

241 Coast labourers were absent down

to Cantonment in one ship to be discharged from the service, and of these 100 men died on the passage. 20 labourers were landed at Lintore.

10 Opium, + 550 men were sent down to England as detailed during the quarter, in 10 Opium but the number of deaths on the passage is not known.

From the 1st of July to 31st Sept 1855 174 Opium, + 4680 men were sent down to the Porpoises in 37 Opium, of these 1 Opium + 11 men died on the passage.

22 Opium + 311 men were sent down to the Porpoises in 3 Opium but the casualties on the passage is not known. 11 Opium and 22 labourers passengers were absent to England.

During the quarter ending 31st Dec 1855 17 ships took 85 Opium, + 1904 men to the Porpoises of these 5 men died on the passage.

7 ships sailed down for England having 35 Opium, + 554 men on board as detailed number of casualties not known in the service.

From 1st Jan^y to 14th June 1856 14 Opium, sent down the Porpoises, having 52 Opium, of these 10 men on board of these 4 men died on the passage.

8 Opium sailed down for England having 16 Opium, + 1999 men on board - Deaths on passage not known.

Making a total of 921 Opium, + 33625 men sent away from the service either as sick or wounded, detailed between the 1st of January

and 17 June 1856, and of these 12 officers
+ 1052 were sent on the passage down the
river. The mortality exceeded the high
percentage sent to England and with the
assurances in the Bureau.

Conveyance of the sick on horseback
proved to be a source of great perplexity
during the whole winter of 1856-57.

During the month of October the roads
were good, the 12 ambulances however, which
had been brought from Toronto, were sufficient
to keep the number of sick in camp within
bounds, but when the wet weather set in
in November, and the roads became deep,
and no means proper to travel, we endeavored
to obtain assistance from the Commissioners, but
this transport was further hindered by their
opinion, and they were unable to afford
us any aid. It was then suggested by the
2nd Regt., that the 10th and 11th Regts
wagons should be made available for this
purpose, but some have they were generally required
for other purposes, and beyond sending the sick
of this camp little assistance was derived
from them.

On two or three occasions in Dec^r
the French offered us relief by sending us strong
detachments of their sick men, and on the
14th Dec^r, finding that all other sources had failed
I suggested that the Canadian horses should be employed
to remove sick sick men as were able to ride, and
avoid here the fatigue of the journey down to Dalhousie;
but this left the worst cases, and those whose

removal was most urgently desired to their
path in camp.

On the 24th Dec^r the English
had a brilliant success in the capture of the
English, and on that day I received the following
letter from the Adjutant General of the Army:

"Sir, I have the honor to acknowledge the receipt
of your letter of the 20th inst. in relation to the
sick of the 2nd Regt. and to inform you that the
sick of the 2nd Regt. are in camp at the present
time, and will be sent to the hospital as soon
as they are able to travel."

The sanitary condition of the
is alarming enough at present, and, with the dense
fog, and exposure to the cold winds, and
during the violent weather, there is doubt
the sick list will increase. The 26th Dec^r we suffered
severely from cholera, and as the 27th Dec^r was
hardly recovered from - most of the men
landed here in the day in heavy rain, and some
of them the 28th Dec^r were taken to the hospital
that had been had to put them on the 28th Dec^r.

The sick are taken down to Dalhousie
daily as far as our limited means of transport will
admit, but it is very inadequate for the purpose,
and we can obtain no assistance from the Commissioners
thence they have not sufficient provisions on
hand, which I believe is true enough. It is
altogether a miserable prospect; and if we are
here as we are there will be a very small army indeed
by the time the winter is over.

Dalhousie	22,956
"	2160
about Lake	1943
"	3140
"	2058
"	250
<hr/>	
	37,232

about of their accommodation

at camp on the 21st Dr. Deane
the following acts from the adjutant general.

Conveyance for two sick has been
placed at our disposal tomorrow morning
at daylight as heretofore. We must be pre-
pared for this. I shall send round the
staff. I am sorry to hear from the reports
to remain thus far in the hospital
You will be shy about. I wish to explain
to appear here, and to get things ready.
at you at Dalakana where I hear you are
going. You should before you return
give all the things going to get things ready.

The morning of the 22nd was cold, but
and it had rained heavily during the greater part
of the night. I went to get situated at daylight to
submit the removal of the soldiers were might
be postponed, but as we were in the humiliating
position of being thus could not be recorded to,
and they were sent to the weather got worse of
the day advanced and they suffered much
misery from the exposure.

To obviate the kind of dependence,
and provide labor for our own work in future
to the Dr. Deane, when writing for field equipment
I suggested to the adjutant general of the Army that
Department, that the ambulance companies
of the army should be re-organized, and put
on a better footing, and that we should have
wheeled chairs, and other similar to those in use
in the French army, in addition to our hospital
cargoes, which were just then sufficient from
the state of the roads, and condition of the mules

equipments
convenient of
ambulance

I also suggested that a corps should be raised,
or formed from men of good character already
in the service, duly trained and organized for
ambulance purposes, whose duty would be solely
to attend to the wants of the public service, and
responsible officers, who would see that they
performed their duty properly, by which means
the hospital would be free of the use of stopping
orderlies for the sick, and carriers, stretcher-bearers,
and in order to save for the hospitals would be
got rid of, and the men of the ambulance corps,
then employed, sent back to the general list, as,
from their age, & previous habits, they were found
nearly useless in service, being slender, weak,
and unskilful; and that some of experience
a non-commissioned might be raised, and kept up
at all expense, than the present inefficient one
sent the government.

All these points were subsequently
considered, and the ambulance of the British
Army was put on as creditable a footing as that
of the French. But, I have said, from my
observations made, put forward, on the part
of the home authorities that they were absolutely
necessary, and it was not before it was made.

On the 5th Feb^r 1855 I made known to the Dr.
a communication had received from the Dr.
of the Army, in reference to the 2000 ambulances,
with canvas covers, of the French model, had been
ordered, and would be sent out as soon as
possible, and I suggested that I would move
the same in camp to have some made out of, given,
and brought for immediate use on the arrival
of the British saddles, shoes, & other from England.

On the 5th of Feb^r 58. Had reports
 from the 2nd Div. that the hospital waggon were
 better equipped for the purpose of horses or mules
 to draw them, and suggested that Dragoons
 should be employed for that purpose, but this
 was not acceded to, and on the 11th Feb^r,
 feeling anxious about the health condition
 we were in, I called a council again on the
 subject of ambulances, and decided that some
 means might be devised for procuring animals
 of some kind or another to draw the hospital
 waggon; as, in the event of an action with the
 enemy taking place, we had not a single
 one of our own, and beyond Camp Dragoon,
 no means of obtaining of carrying the wounded
 off the field; and to bear them to the 2nd Div.
 that we were then near to send them to our
 nothing was done, and on the 1st March I

addressed the following letter to the 2nd Div.
 "With reference to the communications of the
 5th & 11th ult. on the subject of ambulances
 I am glad to hear, that you are beginning
 to draw attention to the subject, and to express
 my very great anxiety at the defective state it
 was in at present. Should any active military
 operations take place where we are so totally
 unprotected, in the way of transport beyond
 our own divisions, for the removal of wounded
 men, the result would be most lamentable."

To this, the following marginal note was
 given in answer.

"Arrangements will be made so soon as
 possible to put mules to the Ambulance waggon"
 So on after this the mules were brought

to the 2nd Div. and on the 3rd March
 1858 an estimate of the probable requirements of the
 Medical Department for transport was called for by
 Lt Col Mordaunt, and the following abstract was forward
 signed for his information.

Estimate of the probable number of animals
 that will be required for the Ambulance Company,
 and transport of stores for the Medical Department of the
 Army in the field.

For a Brigade of 10,000 men and 2500 mules

There will be required for the Ammunition of the

Light Brigade = 8 mules

For 8 Companies of 400 mules for each Co. = 32 "

For a long car for each Co. = 12 "

For the Ammunition of the Light Brigade = 1

Total for one Brigade = 52

2nd for 2nd Brigade = 52

For one Division = 104

For Ammunition of Divisional Waggon = 6

For 2nd Divisional Waggon = 6

For two Companies of Dragoon = 4

Total for 2nd Division = 120

There are four Divisions of Dragoon in the
 2nd Division of the Army and about

the calculation would require = 480 mules

There will be required for the Division of Dragoon = 186

For the Artillery = 136

For the Ammunition of the Division = 60

For the Ammunition of the Division = 8

Reserve mules for contingencies = 60

1000

This was the original estimate drawn up, and it
 an Department much under the 2nd Division
 no difficulty, or inconvenience was experienced
 so long as the Army remained stationary in the
 Peninsula

we need an army improved with an
 ambulance according five percent of the whole
 force; but at a subsequent period I was
 brought that an increase of twenty years would
 be required in the service of the Army to keep the
 field for active service, and tables were drawn
 up, which it may be necessary to illustrate
 here.

Separation of Cavalry, Light Infantry, & mounted
 by a Division of men on active service in the field
 Cavalry - 100 to company - 20000
 Light Inf. 50 " " 10000
 Mounted 13 " " 26
 Light Infantry with
 Light Horse 2 " " 96
 Light Inf. 8 " " 8
 Total 13 " " 78
 Total 500

The Department

Regiment of Cavalry & mounted 2
 50 " " of medical Companies 2
 8 " " Hospital Companies 4
 Light Infantry & mounted 13

Information of intended movements
 was strongly withheld from the head of the
 Medical Department until the very last, and
 much unnecessary inconvenience was
 occasioned by this neglect. It is not sound
 policy on the part of the military authorities
 to conceal from the head of some civil
 branch of the Army, who has some responsibility
 attached to his situation, intended movements
 of the Army, nor is fair towards him

to allow him to obtain his first information
 from common camp followers, as was the case
 with respect to the Expedition to the North American
 Continent. In the case of the Peninsular Expedition
 about 100000 of men, going for an indefinite
 time I received the first official information
 to send the Medical Staff, and prepare the
 Medical Department and work it accordingly
 etc. on the morning of the 22^d of October 1805, and
 the Expedition was to embark the following day.
 The detailed information of the Expedition did
 not receive from the War Department until
 the morning of the 3^d of Nov. - Now the preparations
 were made with some haste & some hurried
 consideration. Even when the Army was
 embarking for England in 1806 the same system
 was pursued - they had taken it upon them
 from past experience, and furnished each Regiment
 with a complete & separate
 of medical stores, so that little inconvenience
 was experienced when they embarked in India,
 but occasionally detached parties were sent
 and then the defective working of the system was
 shown. E. G. on the 27 May received a
 telegraphic message from Calcutta to provide
 medicines, and a Medical Assistant for the
 Fugle Station, which was to sail the following
 day at one o'clock; and at half past twelve
 on the 28 May received another telegraphic
 message from Calcutta to provide medicines,
 and Medical Assistant for the Fugle
 Station ordered to sail at five the same
 afternoon. Fortunately, Messrs. and Medical
 Officers were ready to put on board on the

these occasions, and as that might not
always be the case I brought the subject under
the notice of the Chief of the Staff, and requested
that I might have the same notice as others
when medical equipments were required.
There was no objection given, and consequently
no receipt whatever for putting the Medical
Department to greater inconvenience than others.

On the occasion of an account such
as that of the 13th June, or 8th July, no one would
long believe, and no one complains of additional
labour. On the eve of the assault of the 13th June
I was engaged making preparations in
Camp until 11. P. M. until 11, and then on
the field again at 2. A.M. on the 14th. On
this occasion from the care that had been taken
I thought almost every contingency had been
provided for, and the result was generally
considered most satisfactory. Great, therefore,
was the astonishment, and disgust of
many one, and particularly of some Civil
Surgeons attached to the general hospital in
Camp, when a War Letter in Army Surgeon
appeared in the Times Newspaper. The truth
of the allegations set forth in that letter was
carefully enquired into by a competent
tribunal, and the writer met with the award
his conduct merited.

With the exception of a paragraph
which appeared in the Times on the 18 July, 1855,
in which it was stated that complaints were
again being made of want of medicines
for the wounded in Camp, and applications
had been addressed to the administrator

of the Times Fund to remedy the defect: and
another which appeared in the Times of 1856
stating that the lack of them were stoppages
and from security - not for them articles were
made on the Medical Department. All in
both these instances the reporter was misled
by some one, for the gentleman who generally
reported for that able, candid, widely circulated
and influential paper, *the Times*, would never
to insert anything of the kind himself.

In July 1855 the Hospitals
were liberally supplied by government
that there was no want of medicines, or anything
else, and no occasion to apply to the Times, or
any other paper for aid: and in the Spring of
1856 when the truth of the matter was reported
the stoppage and from security. The Regiment
quitted had not returned a single case of cholera
disease for some time in its Medical Staff.
There were only five cases returned in the course
of the Army which it belonged, and not more
than eleven in the whole Army.

The Principal Medical Officer of the Army
is very much at the mercy of those under his
superintendance and if they do not act
loyally by him they have many opportunities
of embarrassing him considerably, and making
him accountable for many things he knows
nothing of; for a quantity of the duties of the War, and
no one can complain of that, he is held
responsible for all that occurs in his Department
and it is a matter of great importance to
him to have officers who will make the best, &
not the most of every difficulty that arises.

in the course of service, for was never done, and never will be concluded without them.

I may mention the Expedition to which he was sent in May 1755 as one example of his service.

Dr Alexander was appointed Principal Medical Officer of that Expedition, which did not last more than three weeks. He was supplied with the Stores detached in the annexed list, and required to certify himself that he had all he required before he started, as the most advisable to prevent complaints, & disappointments; but no sooner had Dr Alexander left than he complained of want of Salubrious Air, & that we had in the general Hospital at Dalakhon had been withdrawn & ascending the 7th Regt on the Expedition to which they belonged, and Dr Alexander knew perfectly well that there was no other means at that time of obtaining Hospital Orders than by drawing on his private wife complained of want of Air, want of Milk, want of Candies, want of Lard, & want of Salt, all of which were amongst the Stores shipped for the Expedition, & subsequently acknowledged to him by himself - the complaints of the Land Forces in which the Hospital was sent had been issued from the 2nd Regt Horse which was legitimate enough - He complained of these Cases of Drunkenness having been on board after they left the Bombay or Horse at Dalakhon as if the Principal Medical Officer of the Army

Letter of
Dalakhon, 1755
Letter of
Bombay, 1755
Letter of
Bombay, 1755
Letter of
Bombay, 1755
Letter of
Bombay, 1755
Letter of
Bombay, 1755

were commendable for her, and of his having supplied the 7th Regt with Medicines, & Equipment from his Store - The 7th Regt having found the 5th Regiment of Foot to be without any landing at Dalakhon indeed was never made acquainted with anything concerning it, or with the departure of the 7th Regt until they had sailed, and yet Dr Alexander charged with medals on his medals which came hardly within the terms of his obligation. In fact he is a man of many wants, and difficult to please.

At Salisburi he landed as Principal Medical Officer with the first part of the Expeditionary Army, and having taken no precautions to provide himself with the necessary Stores & Equipment for his own use he made a grievance of his own want of administration capacity, and proceeded about the wants of the Medical Department to all the world - At Salisburi his Complaint was not want of Supplies, but that he was compelled to give them to those who required them - and he finally left the place with the Supplies without supplying the Hospital of the 7th Regt, and a Squadron of the 11th Regt was ordered to remain in Garrison there, and put two my Surplus to receive demands from the 7th Regt for their articles two or three days after the return of the Expedition.

On enquiry I found an order had been given for Stores to be landed but it was only received on board the Orient some time after she was getting underway, and could not be complied with.

no one who had read Mr Alexander's
evidence before within the medical profession, or
that of John W. Keble an Lt. Colonel would
have reported this, as he is far in the center
of others on both occasions, and shows no
disposition to hide his own candle under
a bushel. Of course the Hunter at Kerkik
was a useful amount of arrangement on the
part of the Director Genl. Galt, but as it was
only one of many unpleasant transactions
inseparable from the responsibility of the head
of the Department on ground, it is scarcely
worth mentioning, and here I shall close
it but in personal apology, and try to apologize
for having trespass'd on the patience of the
reader so long, but it was necessary to
mention some of the leading circumstances
which embarrassed the head of the Medical
Department in the Crimea, and give his
name such unenvied notoriety. But it
would require the publication of a very
voluminous correspondence to fully elucidate
the whole, which at some future period
I may, perhaps, be induced to give.

Dress

The dress of an Army like that of the
British which has to serve in every quarter
of the globe, and in every conceivable variety
of climate, is a subject of great difficulty, and
complexity, and requires close & mature
consideration so to arrange the different
parts, both as to shape, and material, as to
render them as generally useful as possible,
and obviate the necessity of change, or expense

on the Soldier's removal from one Station
to another. But a plan that can be devised will
be generally applicable both to temperate regions,
and to some within the Tropics, there are however
some articles that may be advantageously
used in both, and on this subject the Regts.
furnished to the queries issued by Lord Howard
when Lt. Genl. in 1837, and to those of the
Genl. the Duke of Wellington in 1840, will afford
much valuable information, and whether
it has been entire or to the extent that it
merited some notice & say. But as these
queries embraced every subject of military
economy, and as they were generally
circulated, and answered, it is fair to
assume that the information obtained would
not be overlooked by those who had called
for it.

The dress of the British Army on
taking the field in Turkey was that which is
in use on home Service, but many
changes, and additions took place in the
course of the war. Some of them useful, others
much out of place both for the climate of the
country, and the nature of the work, perhaps, have
been suggested by attention to the information
obtained by the Director General of the Army
Procurement Department, for in August 1854
he was furnished with an account of the
winter clothing worn by the Russian & Prussian
troops in answer to queries put by him on the
subject. The mean temperature of the Crimea
from the 27 Oct 1854 to the 27 March 1855 was only
38.47°, and, as the winter of 1855-6 was an

MS. A. 11. 1. 1. 1. 1.
7-12-1854
2-27-1855

ordinarily dense one, that may be assumed as the general temperature of the climate near the hospital during the winter. The previous winter of 1852-3, when the British troops before Lapland, the mean temperature of the day was much less than higher; but there was more rain, which rendered it more debilitating to the health of the men, who were thinly clad, badly shod, and frequently lodged, not over well fed, and exposed to the inclemency of the weather, and fearful of snow, and both in the trenches and on fatigues. Fuel was very scarce, which rendered cooking difficult, and means of drying their wet clothes or warming themselves quite out of the question.

As the beginning of June 1854 the British troops, but uncomfortable articles of the soldiers' dress, was directed by general order, that they continued during the storm weather, and in the propriety of this order all medical men should say, must have concurred; as the subject of the soft leather stock was involved in the queries of both Lord Gortchik, and the Duke of Wellington, and therefore its use was probably generally objected to in the answers which were given by medical officers.

In the order of the 19th June 1854 no substitute for the leather stock was named, & at a late period of the year, when the men were nearly shirtless, dirty, and ragged, the want of some kind of covering for the throat was not only prejudicial to health, but gave them an indelible look of misery.

In the course of the winter woollen comforters were provided from one source or another, and in May 1855 regular and handkerchiefs were issued to the same purpose. The leather stock if cut over, and secured into a pair of shoes and buckles at the back or place of the long brass clasp the preceding, is not so uncomfortable, and they told me in 1857, when making enquiries amongst them on the subject, that patent leather or almost any other kind of stock but the common leather one, would wear uniformly, and be much more expensive, and this, I believe, was found to be the case in the trials that were subsequently made.

The Army Landwehr the former without tools or baggage, the men were left their packs on board ship, and did not recover them for many weeks, numbers were lost altogether in the hurricane of the 14th November, and others were furnished - so that the men were not only deprived of the comfort of their beds for a length of time, but when they did recover them many of them found that several of the most useful articles had been abstracted. To separate the soldiers from his baggage, except for a short period, and under very urgent circumstances is not a judicious measure. Had the men landed with their knapsacks, and had some provisions taken in their bags been made much of the misery they experienced would have been lessened. I think the soldiers' great coat should always have a wind-proof hood, & a cap: his shirt should cover in the day

made of iron flannel, a cushioned park,
and when called Zomaks in the trade;
he should wear a broad woollen sock
round his loins; and on horse when
he is to be to have much marching on
that road, he should be furnished with
good stout high boots made wide through
at the top to admit the lower part of his,
which is necessary if they are not shod
with leather. With these alterations, a couple
of pairs of good long towed stockings, a couple
of pairs of drawers, two pairs, a pair or two of
linen mitts and a cambric for the neck
the exposure may be done, & the skin
which was so liberally supplied by government
at a late period would have been rendered
unnecessary, for after all the cold in the winter
is not so intense as seems to be
imagined by many people in England.

As early as the 25th of November
I found that 5000 jersey coats were placed at
my disposal for distribution amongst the
men of the different divisions; and on the 29th
of the same month a circular memorandum
was issued by me urging medical officers
to apply at once for a due proportion of
blankets, and warm under clothing for
the sick under their care. And as Messrs,
Ant, and equipment gave kind and
every effort was made to get them to the
front, but during the early part of the
winter the roads were so bad, and the
means of transport so limited, that little
could be effected beyond the conveyance

of the absolute necessities of life, and it was found
that even had they been brought from India or by
the more tedious air route, it was better
in the hands.

Diet.

The diet best calculated to keep men
in health is a due admixture of animal
and vegetable food, and perhaps the following
scale may be considered ample for all
seasons.

Bread 1 1/2 lbs. or Biscuit equivalent
Flesh meat 1 lb. or Salt meat 1 lb.
Food Vegetable 5^{oz}. Rice 2^{oz}. or Bird's nest 2^{oz}.
Tea 1/4. or Coffee 1/2.

Sugar 1/4.

Lard or Butter 2^{oz}.

Salt 1/4. Pepper 1/2.

It is desirable to give fresh meat, Bread, Vegetables,
Lard, when the climate is not so hot, but salt
meat and Biscuit, with preserved, or compressed
vegetables may give them, or save four times a
week without injury to the man's health.

Coffee also should be given liberally. It was

recommended by a Board of medical officers
in 1794 in the Crimea, and adopted on the 17th March
1806 in the Crimea, and adopted on the 17th March
1806 in the Crimea, and adopted on the 17th March
1806 in the Crimea.

At the commencement of the war in

1794 - 800000 Lard, the ordinary ration of Bread & meat

was - 800000 was issued by the Government; but the

Army 1000000 following articles were sent out in bulk by

the Government, and were ordered to be issued

to the men at the several Regiments, viz. Butter

5^{oz} per quart; salt per quart; Rice 2^{oz} per pound;

Chocolate 4^{oz} per pound; Coffee 1/2 per pound;

Tea 1/2 pound: Sugar 2/3 pound: Rice 1/2 a pound
Custard 2/3: Baking 1/2 a pound

On the 27th June 1854, a Board of Officers was assembled which recommended 1/3 of pepper, & 1/4 of ginger to be issued for the current half year, and that for this an additional 1/2 penny p. d. a day should be made from the soldiers' pay, raising the extra 1/2 penny from 3/4 to 1/2 a day. This arrangement came into operation on the 1st July 1854. On the 19th July 1854, 20 of live were ordered to be added to the men's rations, per 48 pence, at the recommendation of the Principal Medical Officer in consequence of the excessive prevalence of diarrhoea, and on the 20th July, Koolah having broken out in the different camps, a small extra ration was considered desirable and was issued at the recommendation of the Medical Committee: the ration of fresh meat was also increased from one pound to one pound & a half per 48 additional charge, on account of the heat, and poor quality of the meat which was at that time issued by the Commissariat to the troops, and this additional supply was continued so long as the Army remained in Malgaria. The Hind was often complained of, and Besmit was recommended to be substituted for it, but would not be also recommended by the Principal Medical Officer, but, as that time, it was not deemed expedient by the authorities.

The scheme of supplying

the British Soldier with his native beverage or drink in the field was more patriotic than practical, and, in fact, from what was said at the time that experiment of issuing this in bulk under the current market price could not readily be resorted to again.

When the Army landed in the lower left bank, and biscuit was issued, but the men were enabled to obtain grapes in the vineyards, and vegetables from the gardens in the first instance, but this source probably was soon exhausted, and on the 24th of October abundance of honey having been obtained in some town of the P. P. Division of the High Brigade, which had been some time in hand, a letter was written to the Adjutant General of the Army, by the Principal Medical Officer calling attention to this, and pointing out the necessity of procuring fresh vegetables from the neighbouring posts, and advising them to the same effect. Verbal communication was also made to the Commander in Chief, but England permitting out the receipt of lime juice, and on the 21st of the same month 4872 pints were landed from Hon. J. Lambell: 140 pints were brought from Saurah in the Sannalaya Strainers; and 33 were purchased in Balabana, or, or 20700 more, making a total of 4782 pints of Lime Juice received during the December month of 1854 for medical purposes. In Jan^y 1855 4932 pints were received, and in February 6417 more making a total of 10,111 pints - after which period the issue was made general to the whole Army the order for this being promulgated on the 1st of Feb^r.

On the 30th of October 1854 the presence of
Lime Juice in Store was made known
to the Superintendent Medical Officers of
Divisions in a Circular Memorandum
from the Principal Medical Officer of the Army,
and again by a second memorandum
on the 2nd January 1855 in which there is
the following passage: "Lime Juice, and
its several Salts are in Store, & it shall
be recommended their free use in all cases
where there is the least tendency to Scurvy -
In a short time the supply of Lime Juice
is reported from England will admit of operation
of some course for being served out to the
Troops as a prophylactic measure."

It had been intimated to me
that a large supply of Lime Juice had been ordered
out from England, and at the very time I
found the Circular Memorandum of the 2nd
Jan^y part of the reported supply had arrived,
and was actually in Balaklava harbor,
but the circumstances did not come to my
knowledge for some days afterwards, for want
of due concert between the Departments,
but when at last application was immediately
made there a portion issued to the Troops daily.

Some doubt was expressed by the Com-
mander in Chief whether they had sufficient in
Store to commence a daily issue with, and
on the Principal Medical Officer's arguing the
importance of its being issued, if only for
a single week in the Campaign the Army
have lost, he was directed by the Commander
in Chief to go down to Balaklava at once

Mr. Ashby
27th Jan^y 1855
Superintendent
Medical Officer
Army - 1855
Balaclava

and ascertain the exact quantity there was
in Store; and on his return he addressed
a letter to the adjutant general informing him
of the number of cases there were in Store, and
recommending the free & the commencement of
one, and pointing out the mode & proportions
in which it should be issued, and the Gen^l
Order giving effect to that recommendation
was issued on the 31st January 1855.

On the 14th Feb^y 1856 a communication
was received from the Com^{dr} requesting the Prin-
cipal Medical Officer's opinion, as to the proper
quantity of Lime Juice, or otherwise, of issuing Lime
Juice to the Troops, as the Medical Officer did not
allude to the propriety of issuing the use of
Lime Juice generally among the Troops. To which
the following answer was returned the same day:

"So far as my information goes the use of
Lime Juice has been attended with the most
beneficial effects when it has been regularly
administered, and some 900000, as there
already stated, that it should be given daily
as a ration to the whole Army in the proportion
pointed out in the general order on that subject
of the 31st January." It given in that way,
and combined with the use of fresh vegetables,
and fresh meat, it would soon prevent the
tendency to Scurvy which nearly every Russian
Complains give his last Report.

The necessity for Lime Juice, and
fresh vegetables, as well as fresh meat was
strongly urged on the attention of the Commander
in Chief both in official communications
addressed to him, and the members of the

Staff, and by several recommendations
made; and the advantage not only seemed
above the importance of the subject, but did
all in his power to remedy the defect, by
directing the commanding officer to purchase all
the vegetables that were brought into Balaklava
harbour, and to send for them from a distance,
and in this way considerable supplies were
received in the early part of the winter, but
advantage was not taken of them by quantity
orders of half, in all probability for want of
convenience, and a large portion of them perished.

On the 26th October 1854, 10 casks of
Potatoes, 20 casks of Cabbages, and 19 Baggages
that had arrived in Balaklava harbour
were placed at the disposal of the Principal
Medical Officer for distribution.

On the 11th of November the arrival
of a large supply of fresh vegetables by the *Prinz
Friedrich*, and *Archbishop* Steamers was made
known in general orders, and that any quantity
wanted be delivered on board on the receipt
of a receipt from the Master of the ship. Again on the 2nd
of December the arrival of a quantity of Fresh
Potatoes from Trieste, England was made known
in general orders, but on another occasion was
advantage taken of the seasonable arrival
of potatoes of such great importance, and
so urgently demanded at that time for the
health of the men. But in place of numerous
orders being made by commanding officers,
that the vegetables up to camp they were
allowed to rot on board the Steamers.

This shows that the subject of

Fresh vegetables was not overlooked by the
authorities, as is generally believed, and if the
Sleds did not derive all the benefit that
he might have done it was dependent
on causes that were not easily surmountable.

In a communication from
the Principal Medical Officer to the Commanding
in Chief, under date of the 26th December 1854
there is the following remark: "I regret to
express added to want of fuel, proper shelter
and clothing, and an insufficiency of that
which would be sure to produce scurvy - the
few cases of that complaint have been returned
... since, I hope, and I trust your Lordship may
remember submitted previous favourable
consideration when the Army was serving
in Bulgaria; and here we for a time made
and integral part of the Sleds' labour, but a
supply of salt and pepper was not obtained, con-
sidered necessary to be kept in the command
stores for the use of the men; but here where the
articles cannot be obtained from shops, besides
it of the greatest importance that they should
be placed within reach of the Sleds, for without
them their food cannot be made palatable
or easy of digestion."

I may mention that I have heard from
Lieut. Smith, 2nd of the Army, that a very large supply
of Lime Juice has been shipped at his recom-
mendation, on hearing that symptoms of scurvy
had made their appearance in some
few cases. A supply of Lime Juice was
obtained from the Army at the time these cases
first appeared, and it has been in use
ever since.

"It would be highly desirable to have
a weekly supply of fresh vegetables brought
from Constantinople, or any other quarter
where practicable, and, perhaps, the steamers
which are to be fitted up for the conveyance
of mail, and wounded to be used might
be made available for this purpose."

On the 14th of October 1854 an
extra ration of rum was sanctioned
to be issued to the men; and on the 15th
of October the ration of biscuit was raised
from 1lb. to 1 1/2 lb., but it was reduced
to 1 lb. again on the 7th of Nov^r 54.

During part of the month of 1854 &
the condition of the men in camp
before Sebastopol was miserable enough
but as this painful subject has been so
often, and so fully discussed it is unnecessary
to repeat it here.

Great efforts were made by every
one to remedy the evil, and early in spring
bakers began to assume a more favorable
aspect; but it is curious to trace how parties
who were really in no way whatever
instrumental to this change in the condition
of the men, and endeavored to deprive those
who had labored hard to bring it about
of the merit of praise which is their due.

In the Medical Department, the Sanitary
Commissioners, it is fair to adduce
from the remarks of the Secy of State for War
in Scotland, and the Prime Minister
in the House of Commons in England,
must have done this; but perhaps it is not

fair to say so until their report appears. In the
Memorandum on the subject, the Secy of State
contains information on the condition of the men,
their own exertions, and recommendations
to the proprietors of the Commissary General.

§. 5. at page 9 of their report under the head
of "Bread Bread they say;" at least some
private establishments, probably bread, in
Lisbon or elsewhere, which had been found to be
"more salt or fast by private enterprise in
Lisbon, and the men, representing the
"sugar by purchase of the nominal weight
of two pounds, at two shillings, and some at
"1/2 & 3/4. The most urgent craving of
the sick was for a small quantity of bread.

Shortly after our arrival an arrange-
ment was made with these establishments
"by Lord Raglan's directions, by which they
"engaged to supply the surgeons with a certain
"quantity daily, for the use of the hospitals, the
"price on requisition as a medical supply.

To read the foregoing any one would
imagine that no steps whatever had been
taken to procure fresh bread for the sick before
the arrival of the Commissary General in the Peninsula
which took place on the 13th of March; that
on the 15th of Feb^r a demand was made by the
surgeons on the Commissary General for a supply
of fresh bread for the use of the sick in
Lisbon, and on their stating that they
had no means of supplying it, so was
procured from the private bakers in the
village, and daily purchases were made from
that time until the 28th of the same month.

when a contract was entered into with
a Frenchman of the name of Joseph Brouard
to furnish bread for the sick at the rate of 1/2 for the
two pound loaf government providing
wood for the oven - On the 7th March
another contract was entered into with a
Mr Pinnerose to furnish two loaves of
bread daily for one month at the rate
of 1/2 for the 2nd loaf. Government engaging
to bring up the flour from London in which
his contract was submitted by the P.M.O.
of the Army provided Brouard's approval on
the 8th March, and was referred by him
the same day for the immediate report
of Mr Salsbery, Com^d General -

Mr Salsbery in his report of the 11th of
the same month stated: "as they had no
means of baking bread for the Hospitals
and would not have until the arrival
of the floating Steam Bakery then shortly
expected from England, and taking into
consideration the high price of labor, fuel,
and that the Party would be required to
deliver bread of good quality, subject to
the approval of the proper Medical Officer,
he recommended the tender was accepted,
and the original contract entered into
between the Commissariat, & Mr Pinnerose,
in conformity with the Treasury, & War
Office Regulations"

This arrangement Lord
Bulwer sanctioned by his approving sig^{ed}
order, and the contract was carried
into effect. The demand for bread at

that time was very great, and the supply
limited. It was necessary, therefore, to
secure a given supply for the sick daily, but
that did not prevent the purveyor from obtaining
more if he required it, as the wording of the
contract was for two loaves daily, more or less
as required, nor did the delay in drawing
out the contract between the Commissariat
and Mr Pinnerose at all interfere with the
daily supply for the Hospitals, which was done
on the understanding, that as the contract had
been approved by the Commander in Chief
it was to be considered as of actually in force
and binding on both parties.

On the 15th Feb^r 1855. the following
letter was addressed to the Com^d in Chief by the
P.M.O. - "First in a question of general prin-
ciple & the welfare of our Army, that it is
advisable, and highly recommended to your
favorable consideration that a Committee
be appointed to take into consideration the
present mode of obtaining the troops in the Army,
and the quality of our, and what changes can be effected
by way of improvement."

At page 14 the Commissariat
recommended that the Substituted for a portion
of the ration of flour of bread & the same. This
recommendation which was written in fine
I approve of, as found on the 21st March of 1855
the following report in one of my letters to
the Adjutant General of the Army: "The quality
of flour the young soldiers get is prejudicial to their
health, and the quantity of bread which the old
soldiers purchase from the market does them

no good either, and it would be well if the
necessaries were abated. Now that the sailing
is coming into operation we shall be able
to get salt liquor up to camp, which would
be much better for the men than spirits, and,
under proper restrictions, might in both spirits,
and sold to them with advantage. Salt, & Pepper,
as well as other condiments are so much
important articles that I doubt more
attention has not been paid to the subject.

In July last I seized the opportunity
of these articles being a Compendium of 1744,
but up to this day nothing has been done
providing things so plentiful for the men's
health as in July 1744 - to in March 1755
the same want prevails in every part of the
Army. The Board of Health, poor clothing,
have noted this defect in their proceedings.

During the early part of the winter
scarcity of fuel, and want of lamp kittle rendered
it impossible for the men to cook properly the
rations which they received, which were all of
the most unexceptionable quality, and altho' there
were occasional defects in quantity, and
irregularity in delivery, and the supply of fresh
meat was not so great as could have been
wished. Still, in my opinion, there was nothing
in the dieting, or amount of salt meat issued
to account for the painful deterioration of health
of the men had not other depressing causes been
in operation, such as excessive fatigue,
insufficient clothing & shelter, and constant
pressure of heat, & inclement weather without
the means of changing their clothes, obtaining

proper rest, and such cooked, & stewed
food when they came off duty. These causes
all tended to break down the men's health, and
produce Scurvy - that it was not the diet
alone was proved by a thing of the 2^d B^{ty} Light
Brigade, which was quartered on the Eastern height
over the hill on one of the most exposed
positions in the whole Army - these men were
fed exactly in the same way as the other
of the Regt in front, but as they were not so happy
with duty, and had more time to rest themselves,
and make themselves comfortable. The consequence
was that while the other being in front was
harmed with Scurvy, & Scurvy, the
one near Portobello enjoyed temperately
good health, and only lost two men out of a
strength of 321. During the summer months - one
a case of Dysentery, the other a case of apoplexy.

That fatigue, exposure, and want
of that which produce Scurvy without the want of
salt meat is clearly proved by the want of
the Regt were at the Cape of Good Hope, in 1781,
and 1782-7. When the disease prevailed in a
more decided, and characteristic shape than
it ever did in the Army, and in neither case
was a single ounce of salt meat consumed
by the Regt; and that is all, in the year
1781 the men had a ration of 2^d lbs; and
Coffee & Sugar regularly served out to them
daily in addition to their fresh beef, & mutton.

So that even had there been served
out to the Regt in the same manner of
November & December, on which day I saw
the Regt and 6th Dutch by some
Ship

it is probable the result would not have been materially different. The absolute question that was put by the Commissioners on the subject of Salt meat, as an article of diet was positive and the inference drawn from the answers seemed fair & legitimate, but it did not embrace the whole subject, as was proved by the issue of the rifles, which showed that the ration issued to the troops might not be desirable under disease, yet, under more favorable influences, it had not the desired vigorous effect, which the Commissioners could hardly be expected to infer from examining their report on the subject.

Diseases

The duty the army was called out to perform in front of the hospital was onerous, and such as no construction could long be exposed to with impunity, and when the work was completed with their hands, such as defective clothing and shelter, exposure to inclement weather, want of exercise, & various other causes, it is not to be wondered at that diseases of a grave character made their appearance, and swept off numbers. The same, or worse would have happened had the army been encamped in the healthiest part of England, under similar circumstances. There is nothing in either the climate or soil of that part of the Crimea where the British Army was encamped to account for the amount of sickness that took place there in it during the winter of 1854-55, as the one is doubtless equal to the other for from Malabar to the Alps.

14027 march
15 April

On the Plateau in front of the hospital, where the sick of the Army were encamped, there was remarkably the case, and the one or two objectionable points in front of Malakof, which the defence of the place rendered it necessary to occupy were improved as much as possible by drainage, and other means, and on the camp of the Highlanders, was at an early period recommended by the Principal Medical Officer to be abandoned as soon as the circumstances would admit of it.

The plateau in front of the hospital was high & dry, with the limestone rock cropping out in many places, and from the position, and formation of the ground the natural drainage was good by means of deep drains which intersected it. In the direction of the main battery, the soil was deep & heavy, and drainage was not so easily effected, & from the same water being on the surface the roads soon became deep & almost impassable.

Water

The supply of water was ample & of good quality, and when the measures recommended by the Military Board appointed on the 10th March to take this and other matters into consideration were carried into effect little room was left for complaint. Every precaution was taken to prevent the water from being disturbed, but when thousands were anxious to obtain this supply with as little delay as possible it was difficult to prevent the tanks from becoming muddy; but by allowing it to remain at rest a little while this was avoided, and the

such became pure, and clear. Much may
rest on the impurity, and injurious
effect of the water in camp, by certain
parties unconnected with the public service,
but, in my opinion without sufficient grounds
for their statements. One Mr. G. gentleman
in number, with a dissertation on cholera,
which he forwarded to the Secy of State for War
and in that he ascribed the outbreak
of cholera in the 72 Highlanders to the source,
and over drinking in tents, but unfortunately
for his theory cholera made its appearance
in the high command this before it had
landed, or even so much as seen the
camp in point of embarkation. Of course
no one denied the advantage of pure air,
and water, and plenty of space in tents,
and for the Mr. G. gentleman's theory would
carry the opinion, and apprehension of all
medical men with him, but when he came
to attack specific cause I felt to it, it broke
down, as the circumstances of the case did not
bear out his description.

Sanitary

The sanitary concerns your army are
an important consideration, & deserve,
as they generally obtain from official reports
from military Medical Officers; altho' their
suggestions, & recommendations aren't
always attended to by those in command,
& I suppose it must have been under
this impression that Government appointed
Special Sanitary Commissioners, and local
boards, and with superior powers to

those possessed by the Medical Officers of the
Army serving in the East. These problems
were accompanied by a Civil Engineer, and
a Corps of Inspectors of nuisances to aid them
in their labors, and carry out their views.

So far as the labors of the Sanitary
Commissioners came under my notice,
I think, their services might have been dis-
pensed with without any detriment to the
health of the Army in Turkey, as there was
nothing material in their recommendations
which had not been either suggested,
or carried out in actual operations before their
arrival. I wish that I had some under my own
observation in the Crimea, but they may have
furnished their reports, and valuable information
to the authorities at home.

The general orders of the Army of
the East of the 12 May - 28 June - & 30 July 1854
may be referred to with regard to instructions
concerning Lodging, and general cleanliness of
the camp. The Medical Memorandum of the
22 July 1854, & 30 April 1855 with respect to pre-
cautions to be taken when cholera prevails.
Letters to D. M. G. at Sanitary from Mr. G. of
July & 13 Aug 1854 calling his attention
to the state of the Prison in the General Hospital
at Sanitary, to the condition of the Common
Lodging between the Genl Hospital & the Barracks,
informing him that Lord Clifden had at
his suggestion taken steps to induce the
Lodging to remove an offensive cess-pit
manufacturing from the vicinity of the Genl Hosp
during his stay. The 2nd volume of the Memoirs

Sanitary clause, purified & whitewashed.
Letter from Principal Medical Officer
to the A.S. of the 24th Jan^y 1855. on the burial
of dead animals, burning of offal, and
refuse articles, and general sanitary arrange-
ments of the camp.

25 Jan^y 55 to D.M.O. on the same
subjects, and pointing out the highly objec-
tionable sites that had been selected for the
burial of dead animals at the entrance
into Dalhousie.

Letters of 21 Feb^y & 27 March
recommending the rules of the mess tent,
the raised dairy, and their bedding &
clothing to be laid in the open air, weather
permitting, and the tent to be struck weekly,
and the ground exposed to fresh air
freedom how far the state of the weather
permitted got.

It would be tedious to enumerate
the many communications that took place
with the military authorities on Sanitary
subjects, & the granting of the frequent
suggestions that were personally made
to the Commander in chief; but the Queen,
& D.M.O. queries of the 5th Feb^y 1855, on bedding
matters, and the report of the military board
on the health of the 8th March assembled by Lord
Dalhousie in Toronto at the request of the D.M.O.
may be quoted as containing nearly every
Sanitary suggestion that is necessary, or
applicable to an army on service in the
field. To attempt to carry out arrangements
in a camp that are applicable to cities

and the permanent abode of man is a
useless waste of money, & means, and
entirely nugatory, or useless purpose.

The camp before Lehighfort was, from
peculiar circumstances, a fixture for a
year, & 1/2, but that case may be taken
as an exception to the rule. I do not
mean to interfere with Sanitary arrangements,
no military Medical Officer would do that,
but all I contend for is, that, if the same
power had been granted to the Medical
Officers of the Army that was conceded to
the Sanitary Commissioners, there would
have been no occasion to send the blot
out to the East again.

I Photog^r

A Photog^r with two assistants, and
laborers were also sent out to the fort
to investigate the nature & cause of the
disease prevailing in the Army. These
gentlemen were liberally paid in comparison
with Army stipends - What they discovered,
or what it was reported they could discover
that was hidden from the Medical Officers
of the Army I am at a loss to know - Part of
their report which was sent out to the General,
was not confirmed by the experience, & observations
of the Medical Officers in general, who were serving
in the Crimea at the period the peculiar form
of disease was stated to have prevailed. The
question was put freely to the whole department
and their collective opinions sent home officially
to the Director General of the Army Medical Dept^t.
There are some sensible remarks about the infection

of sending out young boys for service in the field. The correctness of these remarks will be admitted by all who have ever served with an army; but there is nothing new in them, and had the authorities reported to the worthy wretches of the Presidential Medical Office of the Army in the East, they would have noticed that he not only pointed out the very same thing months before the arrival of the Patient-ship in the Crimea, but he recommended that these feeble inefficient boys, who were fit for nothing but encumbering the Hospitals, should be sent to the Reserve Depot at Malta.

In December 1854 - when the Hospitals at Scutari were in great want of good trained attendants, a devoted band of ladies and a corps of hired nurses were sent out to whom all praise is due for their devotion, but I trust I may be permitted to say, without extracting from their mouths, that the romantic enthusiasm with which their labors were received in England was not shared by the Medical men either Civil or Military on the spot, who had no object in view, either in carrying services which were of acknowledged value at the time. But as Military Medical men are supposed, for what reason I cannot say, to be inimical to female nursing in Military Hospitals, it will be fair to leave the decision of the question to the reports of the Gentlemen who did duty on the Military Hospitals in the East, and who cannot reasonably be supposed to be biased either one way or the other. To put the question to the test of rational utility we will base the month of December upon Miss Nightingale and her 38 nurses arrived at Scutari. At that time the number of sick in hospital may be estimated at 3200 which would give 4 sick

nurse, a charge, a commissary, or whatever you like to term it, of 84 sick and wounded men. Medical men will understand the amount of service they would be able to render each individual, and almost of the patients were either wounded or seriously ill, they will be better able to estimate the value of such services, than those persons who are led away by their feelings, and reason on what they have seen published in the newspapers. I have taken the month of December as the period of calculation for the services of the nurses, but the sick sent at Scutari were rapidly after that month it must have reached to between 5 & 6000.

Much praise is justly due to Miss Nightingale and the Lady nurses for their courage and devotion to the cause of humanity, in their untiring toils, and entering on second to foreign to all their previous experience. There was such an entire absorption of self in the benevolent undertaking, and the duty was performed with so much tenderness, true zeal, that it is impossible to withhold the tribute of admiration, which is so justly their due, however much one may differ from the principles of the scheme of nursing which was attempted to be introduced into our Military Hospitals during the last war. Nothing could possibly have been more serviceable than the devoted attention of Miss Nightingale, Miss Shaw Stewart, Miss Barr, Miss Knight, and Miss Ferguson who came more immediately within my own observation, nor must I omit mention of Miss Bridgman and the sisters of Mercy under her superintendance, who, in their quiet, efficient, and unobtrusive manner of performing the duties to which they had devoted their lives, have a model of nursing worthy of being imitated by all.

I have always thought, and recent experience in the East has in no way altered my opinion

that there are only two things which can ensure efficient nursing in Military, or any other hospital either objection, or a strong feeling of religious duty. Efficiency is out of the question in large public establishments, save money here, or temporary enthusiasm in public life, and then substitutes for the other.

Much may be accomplished where uncommitted resources are placed at the disposal of individuals as was the case with the Sanitary Commissioners, with the heads of the female nursing establishment, and with the superintendents of the civil hospitals, at Smyrna and Bendera. The extent of the uncommitted liberality to the heads of the female nursing establishment might well excite the astonishment of our allies, and I remember General Bandus Principal Inspector of French Hospitals writing me when he came to the Crimea in the Spring of 1855 how it was that Miss Wightons had the disposal of such enormous quantities of stores, as she had just made them a present of the stores and that of Port wine, and I think he said of a quantity of sweetroot, and essence of Pepp. I, as head of the Medical Department of the Army in the Crimea, was compelled to acknowledge my utter ignorance of the whole transaction, and his fraternal observation, accompanied by a shrug of his shoulders, was great fun to me and still is so throughout the time - and so I think still.

Had the same means and facilities been placed at the disposal of the Medical Department of the Army that were given to the civil establishments attached to it, they would have accomplished as much, or more than was carried into effect, and there is no hesitation in saying at considerably less cost to the public, with equal efficiency, so far as the real work

of the sick were concerned; for I look on it that hospital departments are not essentials, and their admission into Military establishments are of questionable utility.

Civil Hospitals

The subject of Hospital accommodation was one of serious consideration from the very commencement of the war in the East, and when at Bendera in May 1854, on my way from India to Constantinople, I wrote to the Principal Medical Officer at Berlin to ascertain what amount of Hospital accommodation could be obtained there for sick or wounded, and was disappointed to find by Staff Surgeon Armstrong's reply of the 13th June that it was limited to 150 beds, the subsequent period Government established an hospital for 500 sick in the Island of Soggy, which was then been intended to 1000, but unfortunately that was not secured. About 400 sick were sent to Corfu for medical treatment, but Corfu was out of the direct line of communication, since she continued as an hospital station for the Army in the field.

On the 3rd of December 1854, a Military Hospital was opened at Akko 350 under the superintendence of Mr. Ross Duff Langon Esq. Surgeon, and was kept open until the 8th of September 1855, when it was closed, as its accommodation was not required for the sick of the Army; but it was subsequently occupied as a convalescent station for the British Civil Hospital in the Dardanelles.

In the 12th February 1855, the number of sick being great, and the hospital accommodation at Bendera over crowded, an hospital was opened at Smyrna for 750 men. The building occupied was a Turkish Bazaar, and as the basement story was not considered eligible for such the number of patients

was subsequently resumed, and the completion of the building given at 500, but after the month of March there never was any thing like soon that number in it until it was finally closed.

The hospital at Smyrna was deemed a military establishment under the charge of a Colonel Inspector General of Hospitals with a limited, but competent staff under him; but in the month of March a numerous civil staff, under a civil superintendent with a salary of \$2000 a year, was sent out to superintend the military establishment, and the hospital was considered as a civil hospital, from the person the civil superintendent, and his staff joined, until it was closed in February 1855. When it was re-opened as the hospital of the Sea Legion, but it was deemed necessary to return the Superintendent until the beginning of the month of May.

On the 14th of February 1855 I submitted for Lord Raglan's private consideration a rough sketch and short list of points as desirable places for Convalescent Stations to be established at. And when Dr. Pasha wrote to me on the 19th of April to say that he had been sent out by government to establish a civil hospital on the shores of the Bosphorus I drew his attention in my reply of the 23rd to the same place, informing him that it was already occupied by the Commissariat, and some transport troops, and considered to be a healthy and pleasant station.

Lord Raglan, at my request, sent one of the Sanitary Commissioners to report on Smyrna as a convalescent station, and I think the supply of water was made an objection to him, tho' I had understood that there were good springs near, and old Roman aqueducts which merely required some little repair to render them

serviceable. It is clear the want of water could not have been a well founded objection from the number of animals belonging to the Commissariat and some transport troops subsequently collected and kept there.

Dr. Pasha had no opportunity of visiting Smyrna at the time I wrote to him, he is said to have been pressed for time, and afraid of incurring damage and at the suggestion of Mr. Cabot, Consul at the Dardanelles, he selected a site for his new hospital on the fertile shore of the Dardanelles, about 8 miles below the village, and castle of that name, which possessed the advantages of a growth soil, and easy access to sea, but fresh water had to be led down to it from a low range of hills 3 or 4 miles distant. In May the erection of the hospital was commenced, in June a numerous civil staff arrived, but the establishment was not occupied by sick until the following October, and by that time its accommodation was not required as there were more than 3000 spare beds in the military hospitals.

The magnificent style in which these civil hospitals were equipped, and the liberal scale of pay in which the Medical Officers attached to them were placed created discontent among the Medical Officers of the Army, who saw their colleagues recompensed placed in a position so much better than their own in point of pay, and altho' government had in no way broken faith with them that did not prevent them from drawing comparisons, and feeling dissatisfied, nor can it be wondered at when they saw gentlemen, in no way less talented than themselves, placed in charge of comparatively small hospitals and rewarded with salaries of \$2000 a year, quarters & table, when the heads of their own department with all the labor, cares, and responsibilities had only \$1200. Even the Surgeons and Physicians of

he of these 2000 a year
the government had no
about Dr. Pasha's question
until the 30th of April 1855 when
Dr. Pasha's reply was
higher was made, and
to that time a formal report
had been made to the
of the staff Surgeons
and was acting in the
 Crimea!

the civil establishments had a higher daily rate of pay than the Inspector General of Hospitals in the field who had served 40 years in every quarter of the globe, and was entrusted with the responsibility of nearly 100 separate hospital establishments, and the labor of superintending the Medical Department of the whole Army in the field.

To place the comparative labors of the Civil and Military Medical Officers on a clear, and proper footing I beg to annex the following table -

218952 admissions into hospital during the War, 182,013 were admitted into Civil Hospitals:
58,939 into General Hospitals; and of these 2224 were admitted into the Civil Hospitals at Smyrna & Penhieu

Smyrna

During the 38 weeks the hospital at Smyrna was open 994 patients were admitted into it, of whom 81 died.

The personal pay of the Medical gentlemen, and Purveyors attached to it amounted to £15379 per annum and of the whole establishment to £23,864 exclusive of the pay of the Military Staff, and the Deots, and Home expenses of the Patients, and of the expenses incurred for alterations in the building itself.

Penhieu

During the 33 weeks the Civil Hospital at Penhieu was open for the reception of sick 1330 patients were admitted of whom 50 died.

The personal pay of the Medical, and Purveyors detachments amounted to £15378, and of the whole establishment to £24,318 per annum, exclusive of the pay of the Military Staff, the Deots and Home expenses of the Patients, to say nothing of the heavy expense of erecting this magnificent establishment, which was placed at too great a distance from the seat of active

Expenses incurred for Medical & Purveyors at Smyrna £23,864

Expenses incurred for Medical & Purveyors at Penhieu £15,378

operations to be of much use to the Army, and this defect was pointed out from the very first.

Mydus

During Mydus during the 40 weeks it was occupied as a Military General Hospital we find that 314 patients were admitted into it, of whom 82 died.

The personal pay of the Medical & Purveying establishments attached to it amounted to £2,007 per annum, and if we assume a like sum for the alterations the total expense would amount to £4,014 per annum exclusive of the pay of the Military Staff attached to it, the Deots and Home expenses of the Patients, and I think about £1300 for alterations in the building before its occupation as an hospital.

The proportion of mortality is higher at Mydus than at either Smyrna or Penhieu, but then it must be borne in mind that it was opened for the reception of patients during the winter of 1854-5 when diseases of a most fatal character prevailed, and were not down to the mortality in the Smyrna hospital, which was great at that of Mydus for some time after it was opened from the same cause. But the establishment at Penhieu was not opened for the reception of patients until after the Army had become healthy, and, with the exception of the sick transport boats, which had been most injudiciously permitted, no serious disease prevailed.

Several of the Medical gentlemen from both the Civil hospitals, when they found they had no occupation volunteered for the Crimea, but they might have an opportunity of seeing military surgery on a large scale and I have much satisfaction in bearing testimony to their cordial co-operation with their Military brethren, and to the professional talent, and commendable zeal they displayed in the discharge of all duties assigned

to them. But they were in no way superior either in talent or zeal to Army Medical Officers, and I feel called on to make this observation, because statements were sent forth very much to their disadvantage; and their presumed inefficiency was made open for the purpose of being given to credence, under an assumption that their superior talents, and more extended education, entitled them to it. One gentleman in civil life went so far as to insinuate that the practice pursued by the British Medical Officers was injudicious, if not improper, and that Government ought to avail themselves of the services of gentlemen who had resided in the country, and were acquainted with the diseases of the climate, and their appropriate means of cure, which were quite at variance with those pursued by the British Medical Staff, and if he had charge of a ward he would soon make the superiority of his plan of practice apparent. To such an extent, for I believe, it was admitted to the Lord of State for war, it was impossible to remain deaf, nor would any Minister have been justified in refusing aid to a man who had been making such fearful straggle in the ranks of the Army, and an acknowledgment was offered to this gentleman on the terms that were given to other gentlemen from civil life, which he accepted, and was placed in Medical charge of a division of one of the Military Hospitals, where four Military Medical Officers and one Civilian had each charge of a Division likewise, and the following is the result of the comparative trial of practice between the 15th of April, and 22nd of September 1855

No.	Medical Officer	No. of Patients	No. of Deaths	No. of Amputations
121.	Military Civil Officer	138	78	average daily sick 18
122.	Military 5 th	102	117	1 - 0.99
123.	2 nd 3 rd	54	77	9 - 16.91
124.	Civilian	57	57	13 - 22.90
125.	Military Officer	41	77	8 - 19.51
126.	Civilian of local residence	54	77	24 - 44.44

With the exception of No. 2, which was a non-sensit and there was nothing to mark any distinction between the different divisions of the Hospital, nor was any selection of cases made, or advantage taken of the gentleman's position to render the trial any thing but a fair & legitimate one. The mortality in the Army had been too great to be overlooked, and it rendered every man more & willing to discover any mode of lessening it, & that professional jealousy was entirely laid aside on the occasion, and the Turkish plan of practice had a fair trial & was found not to answer well with British soldiers, and, on my opinion, it would have been found more decidedly unsuccessful had it been resorted to at an earlier period of the war, when the men required support and stimulants in place of regulation, in common with the other Medical Officers, was glad the experiment was tried, had not an opportunity been offered this gentleman of testing his own practice, he would have remained under the delusion which he was when he addressed the Secretary of State for war on the subject.

Could advice or assistance have prevented the British Army from disease or death, none ought to have perished, for the number of suppurating Specimens for cholera, and other diseases that were sent out to the Army was incredible. Each posthumous message wanted the surgeon, merits of his own Specimens and they ranged widely between shoe leather and Dr. Wilson's Larders. One man recommended many square miles of country to be strewed over an inch deep with putrid diarrhoea, and an immense quantity of that article was sent out to the Crimea, by whose order no one knew. It came conveyed in the post to the Sanitary Commissioners, I believe, then to the Principal Medical Officer, after that to the Commissary General, and about the time

The army was embarking for England, a large amount consigned to the Lemnaster in Chios, which he would not receive, and directed it to be sent away again. Another gentleman recommended three additional parades a day for the relief of disease, and this too to an army worn down by over-fatigue, forgetting that even on some service on ordinary times an additional parade a day is considered a heavy punishment. The good intention of most of their suggestions was their avowal, but if they could be collected they would form an amusing volume.

Sickness

The detailed report of the sickness and mortality of the whole army will be given in a separate form, but I may be permitted to mention in a cursory manner in this place the leading points connected with it in the Crimea. I have already alluded to Cholera, which prevailed extensively in Bulgaria, to the fact of its having attacked general Sakhovitski's division on the Bosphorus, and proved very fatal on the line of march from the Fort, where the army landed in the Crimea at Balaklava. During the month of October the disease abated considerably, but with the change of weather, and arrival of several regiments it re-appeared about the middle of November & proved very fatal until the middle of December when it finally subsided for the winter, and was followed by scarlatina, diphtheria, & 2 pneumonia in the first instance, and afterwards by typhus fever, all of which were nearly as fatal as Cholera itself in their results. During the month of October 3538 men joined the army in the Crimea.

in November - 4920
 " in December - 6156 making a
 Total of 14634

The mean strength of the ^{British} army in the Crimea during the quarter ending 31st December 1854 may be taken at 33789 of the number 25336 were under medical treatment, and of these 2577 were, and 7933 were sent away as convalescent men.

Many of the recruits who joined the army during the December quarter were quite young lads, and quite unequal to the hardships, and physical exertions which soldiers have to undergo during a siege like that of Sebastopol, and numbers of them, sickness and death soon took hold and were fatal to their lives. They were only calculated to fill the hospitals, without adding materially to the effective strength of the army. Some of the drafts when they arrived were landed in unfavorable weather, and at unreasonable hours of the day. The same thing took place with the drafts and the Hospital Medical Officer considered it his duty to call the special attention of the adjutant general to the subject.

The 46th Regt landed from England on the 8th of November 1854, was immediately marched up to camp, and arrived there late in the evening. No preparation had been made for them, and the men were exposed to wet and cold until about four in the morning when their tents arrived, & were pitched on the wet ground. Cholera attacked the Regt on the 10th & on the 14th all their tents were blown down and both sick & well were exposed for many hours to the inclemency of the weather, great increases of sickness followed, and before the end of the month 79 men had perished.

The 9th Regt landed from Malta on the 27th Nov: 1854, and was immediately marched up to camp and put on duty in the trenches. The weather was cold, wet, and tempestuous. Cholera broke out on the 29th & 30th men died before the end of November, and 51 in the course of December out of a strength of 544. The Regiment had suffered much from fever at Malta in the course of the

known, and many of the men were embarked for service in the British when only convalescent from the disease, and not ill calculated to encounter the hardships, and privations of their new position.

The 62nd Regt^t landed from Malta also, on the 14th Nov^r, and was almost immediately seized with Cholera, which the surgeon ascribed to change of diet, fatigue, and exposure. 16 men died before the end of the month, and 18 in December.

The 77th Regt^t which came from the Straits where it had suffered from Cholera, landed on the 22nd of November, and was soon after attacked with Cholera. 21 men died before the end of the month, and 46 in December.

Some of the drafts of recruits arrived soon more success than the party arrived Regt^t and equal indifference was shown about the way they were sent off to find their Regt^t. The surgeon of the 23rd Fusiliers makes one of these names whose draft of recruits for his Corps was landed, and sent off from Balaklava late in the evening to find their camp, seven miles distant, without guides, or assistance.

The men wandered about in the mud, nearly all night. Some found their Regt^t by other soldiers taking compasses on them and showing them the way; others took refuge with the French, one man was attacked with Cholera and died, and some of the men did not find their Regt^t for two or three days.

In the month of December several fresh Regts^t arrived in the Crimea bringing an accession of strength of 4132 men. They all suffered more or less from Cholera at the beginning of the month, but about its middle the disease entirely disappeared.

In the winter advanced new classes of disease

came prominently forward. Febrile affections which had been comparatively few in number during the months of October, and November, were doubled in December both in frequency, and fatality; chest affections, Dysentery, and Diarrhoea were also more frequent & fatal in December than they had previously been; and Cholera tho' not increased in frequency was especially so in fatality during the portion of December which it lasted. Rheumatic affections, as might have been anticipated, were more common; and Scoury began first to show itself as a distinct disease, and 211 cases were admitted under that head during the quarter, 156 of which occurred in the month of December. This complaint tho' more remarked, and brought more prominently forward during the month of January, and February 1855, most doubtless have received a powerful impetus over other diseases such as Dysentery, and Diarrhoea during the month of December.

In October & November the latitudes of Balaklava & Inkerman produced a great influx of wounded & occasioned much mortality, but these cases were more distinct, and must be considered great from the influence which were at work and generating other forms of disease.

Certain Regiments suffered more than others during the quarter vizt. the 7th 9th 15th Regts. 19th 23rd 30th 41st 42nd 46th 50th and 79th and on the 6th from the number of men who died, and were sent down to death, became vitally inefficient, and it was found necessary to withdraw it altogether from the front before Sebastopol, and station it on the heights of Balaklava towards the rear. During the quarter ending 31st March 1855 two Regiments, the 4th 82nd strong from Malta, and the 18th 71st strong from England and 5789 recruits joined the Army in the Crimea making a total of 241 Officers & 7320 men.

Many of the recruits like those who joined the previous quarter, were more boys and quite unfit for the fatigue, and privations of a winter campaign, and the weakness that they endured and died in great numbers. Scarlatina Dysentery and dysuria which had made their appearance in the month of December continued very prevalent and fatal through out the whole of January, and during the early part of February and in these numerous short fevers were added from severity of the weather, the reduced stamina of the men the heavy duty they had to perform, and the imperfect way in which they were clothed. During the fatigues exposure and exposure of feet & exposure from snow became frequent during the months of January and February; and Dysentery Hemorrhoids, the natural result of so much hardship, and so many privations, which had become prevalent in December continued to increase in frequency & fatality until the month of March when it began to decline, and in the season advanced and the men's duty was lessened and their comforts more attended to it gradually disappeared. During the winter the admission from scurvy disease was from 1119 which they were in December. As 2615 in March and the mortality from 75 to 361. and not only was the disease prevalent in the field hospital in the Peninsula but it extended to the General Hospital established at Seville where it proved equally destructive to many hospital servants sickness & died during the prevalence of the fever and so much unwillingness was shown to leaving them, that in January 1855 I recommended to Lord Raglan the necessity of improving the condition of the hospital servants and recommending that the pay of the sergeant should be raised from £2 to £3 a day with a gratuity and that the privates should have a gratuity and £2 a day in addition to their ordinary pay as soldiers.

which was sanctioned and took effect from 1st of Feb. The opinion of all superintending officers of division was asked on the question by Lord Raglan's desire and got Mr. Alexander, in his examination before the Mr. Hall and Fallock commission, ignores the whole proceeding, and speaks as if nothing had been done to ameliorate the condition of the hospital servants, a curious instance of forgetfulness in a gentleman who could remember at the same examination that on the 7th of March, the day before the Principal Medical Officers application for a Board of Health, that he had had a conversation with Sir George Bagenal about the ventilation of the tents in the light division. During December & January supplies of blankets and warm underclothing arrived and before the end of January all had received them. Buffs' poles were issued to the sick early in January and for large parties of the healthy in the course of the same month, which were found a great comfort particularly after wooden huts with board-plank platforms to sleep on were erected; the getting up of these for want of public transport, was a laborious and fatiguing undertaking to men already overworked in the ordinary duties of the serge, but notwithstanding that it was accomplished in some Regiments for the sick. In those the commanding officer thought Government ought to perform the work, and declined to employ their men on it, under the supposition that the probable amount of transport to be secured would be outweighed by the positive fatigue incurred by the men in such porting huts from Malabala to Camp. no government transport existed at the time consequently when commanding officers declined to do any thing to help themselves the unfortunate sick remained in their misery until assistance could be afforded them by the public authorities.

During the months of December & January the Army was, from a combination of untoward circumstances, in great misery, and it was not until towards the end of January that an amelioration was perceptible in its condition; but from that time forward it gradually improved, until it attained a state of health, and comfort rarely witnessed in camps in the field.

The siege operations were conducted languidly during the March quarter, and the number of wounded admitted into hospital was comparatively small. 124 remained under treatment at the end of December quarter and 342 were admitted making a total of 466, of which number 48 died, or 10.3 per cent, which cannot be considered a high range mortality when the generally reduced state of health of the men is taken into consideration, but of 25240 admissions from other diseases, 2920 died in the trenches. 6167 were sent down to Soudani for treatment in the hospitals there, and of these 257 died on the passage, thus reducing the effective force 1061 below what it was at the commencement of the quarter.

At the commencement of the June quarter the strength of the Army according to the Adjutant General's Returns amounted 53323 men; 7682 joined as new Regiments, & 6036 as drafts for Regiments already in the Trenches. 9219 were absent either sick or on command, making a total force of 50898.

19300 were admitted into hospital in the Trenches during the quarter, and 3880 remained under treatment at its commencement, making a total of 23181. Of this number 17475 were discharged, 13514 to duty, 33020 transferred to hospitals, 3541 to general hospital at Soudani of whom 19 died on the passage down

1271 died of disease of wounds in hospital and 615 were killed in action with the enemy, leaving a force of 48758 at the close of the quarter in Soudani. The deaths at Soudani, and in the other General Hospitals away from the Trenches are not included in this statement; but the whole mortality during the quarter is put down in the Adjutant General's Returns at 3375.

During the month of April there was a general, and decided improvement in the health of the Army. The men's wants were better attended to & although the duty was still severe from the recommencement of active siege operations it did not affect them so much as it had previously done, now that the weather was milder, and their physical condition ameliorated.

Some Regiments continued to suffer more than others, particularly from fever, and of this number the 38th in the 3rd Division, the 41st and 45th in the 2nd Division, and the 79th in the Highland Brigade were most remarkable. In the 79th the prevalence of fever was traceable in a great measure to the site of the camp where it was stationed which was situated on the northern slope of the Balablaqa heights in a deep where the soil was clayey, and water leaked to the surface, and which it was found almost impossible to drain through.

This circumstance had been noted and pointed out to the Military authorities by the Brigade's Medical Officer but there were urgent strategic reasons for its occupation, and it was long before the removal of the troops would be consented to. It was at last sanctioned, and the Regiment was encamped on higher and drier ground, and a great improvement in its sanitary state almost took place.

At a subsequent period the 31st Regt was put into the huts which had been occupied by the 79th

Highlanders, and it was attacked with Cholera, as were
two Bataons of Artillery, and a small arm. Brigade
which were encamped outside outside the lines just
above where the slope terminates in the plain and
where the soil was of the same nature as that on which
the tents of the 79th were built. The small arm
Brigade which had only just landed from England,
was more severely affected than the two Bataons Ar.
H. which had been brought down from the Camp in
front. The Principal Medical Officer visited this En-
campment as soon as ever he heard of its condition,
and on his arrival there he found that the small
arm Brigade had lost 9 men by the disease, and
had 65, out of 93 sick. The whole encampment was
moved the same afternoon to a Hill on the plain,
and an immediate improvement took place in the
health of the men both of the Bataons, and the small
arm Brigade. This circumstance took place at the
beginning of June, and in stating it here I have anti-
cipitated the regular march of Cholera, for Cholera first
appeared early in May and proved fatal to many
It attacked the Regt. successively arrived in the Country, &
recruits who had joined their respective Corps. It was
first noticed in the 2^d Division, and was for a time
confined to it, and the 1st Division.

It broke out after a shift of wind to the S.E.
and most of the first cases occurred either in the Frontier
or on return from a tour of duty in them. After a
short period the disease ceased in front, and at-
tacked the troops in, and about Malakheia.

Some villages that had just arrived, and were
encamped on high, dry & perfectly fresh ground did not
suffer the pestilence. So that in ascertaining the cause of the
disease may be, it is clear many of our predecessors

views are erroneous. For instance when the disease
appeared in the 2^d Division it was ascribed to the im-
purity in the trenches, and they were very properly
removed so far as circumstances would permit. In
Bengal County was supposed to have exercised an
injurious influence over one portion of the trenches, but
subsequent examination after the capture of Sebastopol
proved that it had not been used recently as a place of
deposition, and even if it had the distance was too great to
admit of its exerting any very marked influence. The point
was that other causes besides these must have been in
operation such as fatigue, atmospheric change &c.
because altho' the supposed speaking cause, diminished
the disease suddenly subsided, and made its progress
more at a distance amongst civilians, and the troops
stationed in, and about Malakheia, and Kadiker.

Bad water, improper food, and over-
crowded tents, as I have already stated were supposed as
speaking causes of the disease in the 72^d Highlanders
by a Mr. gentleman who was attached to the Corps and
who thought it necessary to forward his report to the Secy
of State for War, but unfortunately for his theory the disease
broke out in the 72^d Regt. while it was still on board ship
off Brest and before the men had even set foot in the
Brema at all. So that none of the causes alluded to except
perhaps overcrowding were in operation. It is however
never the importance of pure water, wholesome food and
simple space, and at that time might with propriety have
been added, moderate duty, for the preservation of health.

With reference to the reappearance of Cholera
I give the following remark in my weekly report of sick
to Lord Bagenal of the 30th April. "The epidemics from Bengal
complaints are fewer, but among of the number there are
three of Cholera, two of which have died since the

state was closed, and the third is in a non-progressive state. Two of these cases occurred in advanced men in the castle hospital at Balaklava which it is difficult to account for unless they brought the seeds of the disease down with them from the front, as there is no local exciting cause that I can discover. The tent in which they were accommodated was perfectly new, well situated, properly ventilated and not overcrowded.

In my report of the 6th May I find a death from cholera reported in the 48th Regt. a newly arrived corps, and one in the 8th Hussars, in a man who had just returned from Scutari where he had been for a length of time under medical treatment.

In his return he took to vomiting, and the night before his attack he was seen by my out-queue doctor. In that in this case the man soon afterwards vomited the disease. But these casual cases of cholera create suspicions on account of what might follow, particularly from any removal of Scutari men that prevailed in the army at the time; and the apprehension was realized very soon, for the next day the 8th Hussars were reported, on the 9th inst, on the 10th inst, and on the 11th inst, making a total of sixteen that I had to notice in my next weekly report. Up to that period no case of cholera had been reported in the 3rd Division and the attacks in the other Divisions were too generally supposed to admit of any immediate local exciting cause being put on account of its appearance.

The cause of cholera cannot be said to derive entirely on any local cause, or it would never be absent from certain localities where it has occasionally appeared but it is clear there are conditions of the atmosphere, not yet well understood which seem to favor its

generation, and diffusion.

In the present occasion a hot moist South easterly wind, which prevailed on the 7th 8th 9th of May appeared to bring into activity, & disseminate the miasm of the fearful pestilence. On the 10th & 11th it spread was aided for a short period by a heavy fall of rain which saturated the earth with moisture and cooled the air. There was but temporary respite in the course of the following week the mortality rose from 18 to 109. The disease attacked chiefly the newly arrived Regiments, and the Buffs and 48th suffered most. The ground on which they were encamped was objectionable on account of its flatness, and the tenacity of the soil which retained the surface water, and after the heavy rain of the 10th & 11th it became a perfect quagmire. These two Regiments were immediately removed, at my recommendation, to higher and drier ground with the happiest effect, but the camp of the 2nd Battalion of the Royals, a newly arrived corps also, could not be changed for similar reasons, and they remained where they were, but the ground was less objectionable than that on which the Buffs and 48th were placed, and they did not suffer so much.

Towards the end of May the disease moderated in camp in front, but broke out with great violence amongst the troops, and shipping at Balaklava.

In my weekly report up to the 15th June I find the following observations: It is difficult to trace the source of cholera in all cases, and I may mention G. Baskin of artillery as an instance. He arrived from England on the 4th June, and was encamped on a dry grassy ridge between Head 2^d and the masonry of St George's, far away from the contamination of all other Camps, and on ground that had never been occupied by troops before. Yet cholera broke out among the men, and six

of them had died when the report was written, and more were laboring under the disease at the time. So far as the side of the Camp was concerned, it was to all appearance, unexceptionable, but still, as the disease had made its appearance there, I recommended Captain Key to remove it to a higher part of the ridge, and give a healthy quantity of lime to the men which they worked themselves, and which Lord Baglan to whom I reported it on my return to head Q^r immediately sanctioned.

From the 18th to the end of June the disease continued to increase, and became more general.

On the 24th Major General Sitouat a lieutenant general of the Army died; and on the 28th Lord Baglan fell victim to an attack of the disease in a modified form.

General Sitouat was ill on the 18th of June and exposed himself the whole of that day, and the greater part of the next, during the flag of truce, and thus over fatigue developed the disease in its characteristic form. On the 23rd the liver, and kidneys had resumed their functions, but heat did not return, and in the course of the afternoon there was a fearful hemorrhage which seemed to exercise a baneful influence over the disease, and depressed the vital powers of life to such a degree that nature was unable to rally, and he died about four in the morning.

Lord Baglan whose mind was apparently much depressed by the repulse at the Tada on the 18th, as well as by the sickness, and death of his personal friend the lieutenant general, was seized with profuse, painful watery purging on the 22nd which went on for three or four days without attracting much attention and he continued to discharge his official duties up to the morning of the 26th when I was called to see him by Dr. Pennington his personal medical attendant

I was much struck and alarmed at his altered countenance, and appearance more than by the urgency of his other symptoms, and on expressing my apprehension to Dr. Pennington he said he thought much of what I saw was nervous I suggested that his Lordship's illness should be kept at home. And the next day still feeling apprehensions were I recommended some one to be called in in consultation and Dr. Pennington named Sir Alexander, D^o Surgeon General of Hospitals, who came here in the course of the afternoon, and told his personal staff that his Lordship had not a single unfavorable symptom.

Lord Baglan's voice was hoarse at the time, and although his skin was moderately warm, and his pulse distinct he had not power over the sphincters his motions passed from him involuntarily, and about mid day on the 28th he was suddenly seized with oppressed breathing, and between 8 and 9 in the evening.

The total number of cases of Cholera admitted during the quarter in Senegal was 1400 of which 691 proved fatal, and 69 cases of Dysentery died out of 4853: 24 cases of Dysentery also died out of 635.

But to avoid complications, on point of mortality came poor, and in front of misadventure they far exceeded them, for 7370 were under treatment in the course of the quarter, and of this number 604 died.

Wounds and injuries were also numerous this quarter and 234 deaths took place under that head. Active siege operations commenced early in April on the 7th June the French stormed the Mamalon, and the English attacked and carried the granary in front of the Tadam with comparatively little loss, but in the course of the night the Nigerians made several attempts to retake them, and in the course of the whole

operation 11 Officers and 122 men were killed, and 36 Officers, and 510 men were wounded.

In the 18th June a combined attack was made on the Malakoff, and Bazaar by the allied army, at day break, and was repulsed. The loss of the English on this occasion was 21 Officers, and 230 men killed, and 71 Officers, and 1483 men wounded. In the night the Russians made a sortie which was repulsed with a loss on our part of 7 men killed, and 42 wounded making a total of 1854 put hors de combat.

On this occasion every preparation that could be thought of was made, and the wounded, &c. here, were placed in as favorable a position as can ever be expected in service. Indeed, they were much more favorably placed than is generally met with, and the result was satisfactory.

At the commencement of the September quarter the army in Turkey amounted to 662,060 men of which number 6698 were absent sick or on commone and 4235 were in hospital in the Crimea. 8801 men joined in the course of the quarter making the total effective strength 50,861, of this number 28257 were admitted into hospital in the Crimea of whom 27693 were discharged, 1379 died, and 3420 remained under treatment on the 30th of September.

Of the number discharged 22523 were dismissed to duty, 672 were sent to England as Invalids, and 4499 to the General Hospitals down the Bosphorus of which later number 19 died on the passage down land and on the passage to England on board the *Sabirah* and *great Tasmania* hospital ships. These vessels had been fitted out with great care in England, and were fully equipped, and most liberally supplied in every way by government, so that no blame can be

can be attached to them; but they were sailing ships. Calves are frequent in the Mediterranean during the summer, the voyage was tedious, and hospital gaspinge infections notably broke out amongst the wounded on board, and swept off many men.

The following summary of the leading diseases will exhibit at one view the heads under which the most fatal complaints were admitted in the Crimea during the September quarter 1854

	of Cases	admitted	of whom	recovered	and	total	number	died
Zyuzuky	2024	---	2218	---	49			
Dysentery	8821	---	9605	---	98			
Cholera	816	---	1096	---	312			
Wounds & gunshot wounds	8788	---	4468	---	434			
Scorbutus	942	---	1045	---	9			
Fractures	83	---	100	---	12			
Amputations	60	---	54	---	12			

At the commencement of the quarter Cholera, & Dysentery prevailed to a considerable extent, but from about the 10th July to the end of the month there was a marked improvement in the health of the army with the exception of a Squadron of the 10th Regt which had been detached to a place called Bormalka in the Baida valley, and the 18th Regiment, a party around Cape Haderok at Haderok. Haderok is built on a slight knoll where the valley leading from Balaklava opens into the plain, and is not a desirable station to send troops on their first landing, but there was some military reason for the arrangement which I do not remember, and the 18th was allowed to remain there until December, and Cholera became so common among the men that I considered it necessary to recommend its removal to the hills on the Western heights over Balaklava, which the Brigades of Guards had occupied during the winter. This change

was attended with some, but not such marked advantages as I have occasionally seen result from similar works on other occasions, but the reason has doubtless owing to the men being employed daily in Balaklava either on guard, or on fatigue duties; so that the locality of their camp was changed many of them were exposed for hours daily to the deteriorating influence of the air of that place.

The 31st 41st, and 39th Regiments suffered from Cholera in Camp this month, but during the latter two thirds of it there was a marked decrease of Diarrhoeal complaints in the Army at large.

Towards the end of July the weather changed from dry heat to a moist southern wind, which was followed by a heavy fall of rain at the commencement of August, and a re-appearance of Cholera in the 72nd Regt and some companies of the 1st Hussars which had recently arrived from England. This outbreak was of short duration, and not of any particular violence, and with the exception of the 1st Hussars' corps, its prevalence was never remarkable afterwards. It could not be said to have ceased altogether until December, but the attacks were so scattered that they attracted little attention except in those Corps of Cavalry, recently arrived in the Crimea, and here theory was again at variance with actual experience. The 1st Dragoon Guards and Carabineers were encamped on the plain outside Kadakia on their arrival, and not in the Kadakia valley with the rest of the Cavalry Division. Here Cholera soon showed itself, and under the supposition that the ground they occupied was not the most favorable it was changed at the suggestion, I understand of the Sanitary Commissioner, but without any marked advantage or diminution of the disease, rather the site of the new camp was higher

and apparently better situated.

The 10th Hussars, and 12th Lancers, both Regts, recently arrived from India were encamped on high, dry, and apparently slightly elevated between the Kadakia & Karani valleys, but they did not escape Cholera. The 12th did not suffer much, and was not attacked early, and the greater part of the loss in the 10th was confined to the Squadron detached to Vermutha in the Karani valley. Another curious instance of the erratic nature of the attack of Cholera occurred in the 3rd Division at the beginning of September.

The 3rd Division was as much concentrated in Camp as any other division of the Army, and of course exposed to all the local disadvantages of such a position. During the week ending 4th September 11 admissions, and 4 deaths in Cholera were reported in the Division, but it is somewhat odd that 7 of the admissions and three of the deaths took place in Detachments of the 39th, and 89th Regiments employed as a Guard in collecting forage in the Karani valley.

From this period the general health of the Army improved, and Cholera gradually disappeared, but on the 8th of September the Redoubt was assaulted by the English, and the Parashoff captured by the Prussians with heavy loss on both sides.

In the Redoubt the loss was 29 Officers, and 467 men killed, and 124 Officers, 21766 men wounded 10 Officers, and 170 men were captured missing, making a total of 2386 casualties. Nearly the whole of this great mass of wounded was brought in on the evening of the 9th noon, and early part of the night and accommodated either in their own Regimental hospitals, or in the General Hospital in Camp, and their injuries were promptly and judiciously attended to.

The men who fell too near to the Encampment

wounds to be brought in were removed at daylight the following morning, as well as such wounded Europeans as had been left behind by their countrymen.

The ambulances on this occasion did us much well, and the made chairs, and Litters with which the army here by the time was supplied, were found very useful. Numbers of the wounds received on the 8th of September were comparatively slight, and before the 22nd 1000 had been discharged from hospital, but even the nature of the source the men were employed on, a great many were shot thro' the chest, and upper part of the body, and as these wounds are generally dangerous, several of them proved fatal.

The strength of the army at the commencement of the December quarter, exclusive of Land Transport & Army works Corps was 55,480, of which number 7086 were absent either sick or on command leaving 48,394 in the Guinea, and those joined from England in the course of the quarter 2661 recruits.

The mean strength of the European portion of the Land Transport Corps may be taken at 2700 men.

9420 men remained sick in hospital in the Guinea at the end of the previous quarter 17,118 were admitted in the course of the December quarter making a total of 20,538 treated. Of this number 16,970 were discharged 477 died, & 3188 remained at the end of the quarter.

Of the 16,970 discharged from hospital 14,478 were sent to duty, 588 were treated in England and 1904 at the general hospitals in the Barbadoes, and of these 5 died on the passage making the deaths in the Guinea 482.

The following is an abstract of the most prevalent complaints during the quarter.

Fevers Remained 603	admitted 2877	Disch. 156	Remain 2467	
Dysentery	257	740	15	82
Diarrhoea	685	5328	53	346
Shivers	13	216	131	"
Hoarseness	910	407	53	110
Contusions	67	742	2	88
Prophylaxis	8	7	4	3
Fractures	31	68	1	32
Great Loss	"	392	2	241

Immediately the heavy trench duty ceased and the men obtained a due proportion of rest the health of the army improved, and with some trifling exceptions continued good through the whole quarter. At the commencement of the quarter about 8000 men were employed daily on fatigue duty in road making, tent building, and other duties connected with their own comforts, but the duty was not fatiguing, the weather was fine, and the labor conducive to health.

The 82nd Regiment, not long landed in the Guinea, and stationed in the neighbourhood of Badaklara had a heavier sick list than any other Corps in the Guinea, but the mortality was small.

The Land Transport Corps had not only a heavy sick list during the whole quarter, but it lost a number of men from Low Fever, Dysentery, & Shivers.

A number of young lads, recruits in the suburbs of London, and other large towns, were sent out in the course of the quarter. They wanted physical powers for the work imposed on them, they had not been accustomed to outdoor work, and were drawn from the underfed and dejected class of society in towns which fills the poor hospitals at home.

These young lads arrived at the beginning of winter, and joined a Corps unorganized, and without

a sufficient number of Officers and non commissioned officers to teach them not only their duty, but how to take care of themselves. The consequence was they were out in the morning without their breakfast, were employed the greater part of the day, and returned weary and jaded to their camp at night without energy sufficient either to cook their food, or clean themselves. In fact the scenes of the previous winter were acted over again on a small scale, and had the privations and duty of the men of the Land Transport Corps been as great as those of the recruits, who joined them, the previous winter, were, the mortality would have been fearful; but they were well clothed, and fed, and that there was nothing in either the nature, or severity of their duty, very injurious to health, is proved by the condition of 800 soldiers who were attached to the Corps, performed the same duties were clothed, fed, and lodged exactly in the same manner, and yet enjoyed excellent health, the only difference being that they had learnt by experience to take care of themselves.

The same result followed when the Land Transport got better organized, and when all the weak, inefficient young lads had been disposed of. That is was an error to fill the ranks of the Corps with such recruits, as they would have been an absolute incumbrance had the Army been compelled to take the field early in 1856.

On the 14th of November two men of the Guards lost their lives, and some others were injured by the explosion of a hidden mine in the Bastion which was exploded by one of them hearing when it. A number of the bravest volunteers were left in every direction, but I think, in only this,

and one other case was life destroyed by them. I believe, as many as 15 were discovered by one single Officer, and it is probable many still exist which it is probable the Prussians will reap the advantage of, should they begin to ransack the rubbish and rebuild the town.

On the 15th of November a serious and destructive accident took place, how see around has never been very satisfactorily explained, but on that day the same magazine of the right bank, both French and English exploded with destructive effect, and killed and mangled a number of men. Fortunately the explosion took place at a period of the day when numbers were absent from Camp on duty, or the loss of life would have been much greater. If it was the English had 1 Officer, and 20 men killed, and 5 Officers and 135 men wounded. The loss of the French was still greater, report said about 250.

An old wood mill full of ammunition which was in the immediate neighborhood providentially escaped the the rest was on fire, and the door was driven in by the concussion. The explosion destroyed much public property, and damaged, or utterly destroyed several hospital tents in the immediate vicinity. Shells passed over our Hospital Magazine full of iron without injuring any one. The Hospital tents of the right bank burst, which were close to the magazine and contained 60 patients at the time of the explosion came down like a pack of cards, and only one man was slightly injured. The man who was able to move another from the tent on the first alarm, and those who were unable to leave the hospital crept under the iron bed cots which protected them from the falling planks and timbers. Considering the quantity of powder exploded, as well as the number of shells, the

Procheta, there was reason to be thankful the leg of the
was so small.

In December severe frost set in with a
strong north wind, and the Thermometer fell to zero on
the 19th & 20th so many as 269 cases of frost-bite were
seen and in two of put these cases death was occasioned
by the direct effect of cold from men getting drunk and
lying out, all the worst cases that occurred, were con-
tracted in this way, but the generality of the cases were of
trifling import affecting the tips of the ears from the men
neglecting to put down the earflaps of their caps, the
fingers from the men holding cold substances, or going
with their hands exposed, and the toes from men
walking in wet boots. One had went out at night
to the heavy in the intense cold without either shoes
or stockings on, and the consequence was that both
his feet were seasonably frost-bitten.

The general health of the men who
met with these accidents was excellent, and conse-
quently the results were not so lamentable as they
would during the previous winter when the health of
the men was completely broken down.

With the winter came affections of the chest
at first in the shape of colds, but successively in that
of Pneumonia, and from this disease several men died
in the course of the following quarter.

The effective strength of the British army in
Lishey at the beginning of January 1856 was 54,889,
besides 5,124, men belonging to foreign Legions, & 6,122
to the Land Transport Corps. 66,011 joined during the quar-
ter. 5,328 were absent either sick or on command on the
1st of Jan^r 4,560 men died during the quarter 2,792
were either invalided or sent to their Depots, 70 were
promoted to commissions, 90 deserted and

325 were transferred. — Leaving a force of about 51,000
men in the Crimea of whom 30,000 were in hospital at
the beginning of the quarter. 12,518 were admitted in
the course of the quarter, and 126 died. The Land Transport
Corps out of men strength of 5,821, admitted into hos-
pital 2,627, and lost 124. 2,178 invalids were sent
from the Crimea during the 2^d 489 to England, and
1,209 to Scutari, and of the latter 3 died on the passage
down.

The regular troops enjoyed an unusual
exemption from disease, and could interpenetrate
have been banished the mortality would have been
very small indeed, as it was sickness and mortality
gradually decreased from the 1st of January, until the
23rd Feb^r when there was not a death for a whole
week out of a force of between 42,000 & 43,000 men, a
happy contrast between that & the same period the
previous year when the mortality was greater any
one week than it was during the whole of this quarter.
2.9. in the first week of January 1855, 15 deaths oc-
curred, in the same period in 1855, 262. During the
4th week the deaths in 1856 were 13, and in 1855, 338,
out of a force of 29,695. These affections were the most
prevalent and fatal complaints amongst the regular
troops, but early in the quarter Ophthalmic cases became
prevalent in the 4th 55th 56th 97th Regts and one or two
other Regiments that had suffered from the disease on
other Stations. There was nothing in the duty, locality,
food, clothing, or hunting of these Regts different from those
of the rest of the army, and nothing that could be traced
to account for this scallous complaint. By converting
the General Hospital at the Monastery into an Ophthalmic
depot, and by separating the cases early, and not sending
any of the men home as invalids as first, the disease was

Left for a time in obedience but it is extremely difficult to eradicate the complaints when it once establishes itself in a Corps.

The results of this years experience shows how much depends on having trained soldiers, moderate duty, and proper food, clothing & shelter.

The contrast is in the Land Transport Corps, which out an average strength of 5821 had 365 men sick at the commencement of the quarter, admitted 2627 and lost 124 chiefly from Typhoid Fever. This Corps was as well fed, and clothed as the rest of the Army, and that there was nothing in the nature, or amount of duty the men had to perform, very prejudicial to health, is proved by the good health which the soldiers of the line attached to it enjoyed. In a note attached to the weekly state of sick up to the 26th of January 1856. I see it is stated that out of 1279 men so attached only 14 were on the sick list, - on the 2nd Feb^r. 25 were sick out of a strength of 1533, and on the 9th of February 27 out of 1531, and during this period the furlough boys that had been sent out to join the Corps sickened in great numbers, and many of them died, or were sent away. Only 16 furlough boys were obtained for the sick in place of Paragonies.

The Corps was re-organized, and had a due proportion of Officers, and non-commissioned Officers appointed, and were able to look after, and discipline the men, and from that period regularity, and improvement in health went hand in hand.

About the beginning of March this was perceptible in the mens countenances, and from that time the health of the Corps steadily improved, until it nearly equaled that of the Regular Army. The whole price in the Crimea, to which these remarks have been confined, maintained the high state of health, and

efficiency it had attained until it embarked for England, or other stations. Much has been said, and written about the unparalleled sickness, and mortality which took place in the British Army during the last war. It certainly was very lamentable, and the toil, and misery the men had to undergo at the commencement of the winter campaign of 1854-5 very distressing, but to say that it was unparalleled is to state that which is not matter of fact, because there is no occasion to go beyond the records of the last war to prove that the loss of both our allies and ourselves was much heavier than our own.

The following statement of sickness, and mortality appears formidable, and so does that of all wars if faithfully chronicled. On this occasion no attempt has been made to lessen the number of deaths on the contrary all casualties have been included that have been discovered by the Regimental Surgeons since the conclusion of peace, and of course in this way a number of men who were formerly returned missing are now included in the general casualty list of the war.

According to the reports General Brevet 98,000 men joined the British Army in the East of India of Land Transport, and other Land Corps sent out for one service or another.

98,000 Total Strength

152018 Primary admissions into Regt. Hospital

56234 admissions into Regt. Hospital within

the limits of original cases.

218252

18,059 Sum of wounded & diseased

from Sept. 1854 to July 1856

2730 were killed in action

20809 Total Deaths

11562 Invalids

32371 Total men effective.

It would give a ratio of mortality to strength of 21.23 per cent for the two years and quarter that the war continued. If of the killed in action be deducted, the per centage would be 18.42. Including the men effective but the per centage would be 33.03.

Apartly to a memorandum given to me by Monr. Secord the head of the French Medical Department in the Crimea

230,000 men joined the French Army

62,000 Died

30,000 were Invalids

120,000 returned to France

leaving a mortality of 26.95 per cent; and leaving 20,000 men unaccounted for.

The Land Transport Corps out of an average strength of 3257 lost 500 men or 15.21 per cent in 13 months

The number of wounded admitted for surgical treatment during the war, was 12091. but the military return (2151) which is perfect, as many men may have been returned by the military who were so slightly injured as not to require surgical aid. The following summary of killed and wounded on the several occasions when the Army was actively engaged with the enemy may not be uninteresting.

1st the battle of the Alma 20th September 1854
 There were killed 25 Officers and 327 men - Total 352
 Wounded 73 " 1539 " 1612
 Missing - " 16 " 16
 1980

17th October 1854. Opening of the Bombardment of Sebastopol

Killed 1 " 20 " 21
 Wounded 1 " 94 " 95
 116

25th October 1854. Battle of Balaklava

Killed 12 Officers 131 men - Total 143
 Wounded 25 " 211 " 236
 Missing 2 " 55 " 57
 466

26th October 1854. sortie from Sebastopol

Killed " " 11 " 11
 Wounded 7 " 85 " 92
 103

5th November 1854. Battle of Inkerman

Killed 43 " 589 " 632
 Wounded 100 " 1778 " 1878
 Missing 1 " 62 " 63
 2578

7th June 1855. Taking of Inarces

Killed 11 " 122 " 133
 Wounded 36 " 510 " 546
 Missing " 15 " 15
 694

18th June 1855. Assault of Redan

Killed 21 " 230 " 251
 Wounded 71 " 1130 " 1211
 Missing 1 " 20 " 21

21st Sept Killed " 7 " 7
 Wounded " 42 " 42
 1532

8th September 1855. Second assault of the Redan

Killed 27 " 357 " 386
 Wounded 124 " 1766 " 1890
 Missing 1 " 170 " 171
 2447

15th November 1855 explosion of Night attack Magazine
 Killed 1 Officer 19 men - Total 20
 Wounded 5 " 114 " - 119
 Missing .. 7 .. - 7
 146

The remainder of the 12091 wounded + 2758 killed
 were made up by casualties in the trenches during the
 siege.

The detailed surgical history will lagreen the
 whole, but the following approximation may not be
 uninteresting to the reader.

Of the 12091 wounded admitted into the primary hospitals

1156 Died there, and

686 in general hospitals and on the passage

Total 1842 down to feature.

Of the above numbers 578 were Officers of whom

81 died which gives a per centage of mortality of 14.01.

That of the men being 15.29 per cent.

954 Primary amputations of one hand or another
 were performed in the field hospitals of which

236 died in the trenches or 22.39 per cent, and

716 were transported to Leamington or other troops for further treatment.

86 Secondary operations were performed in the field hospitals of which

96 died or 59.32 per cent.

64 Secondary operations were performed at Leamington of which

41 died or 64.06 per cent. Being a mortality

out of the aggregate number of 123 secondary operations of

61.78 per cent.

The mortality in some of the larger operations of surgery, the hip joint in particular, is so sad and inevitable that it is a question in my mind whether this part of surgical barbarism is ever justifiable, it certainly is not unless the destruction of the soft parts is so extensive as to leave no alternative but that of amputating

the limb. I see accounts published in Mr. Southey's appendix to his work on Surgery, of one case of hip joint operation performed after the Battle of the Marston by Mr. Abernethy that lived three weeks, and of another in a Russian prisoner performed at the same time who lived six weeks. These two men except I have never been able to ascertain, as all the wounded were shipped off for Leamington in the course of two days, and no cases of that kind ever reached the general hospital there. I can speak positively that there were no cases of that kind there on the 3rd of October 1854 when I visited the general hospital.

I must not at times that the only case which had to be put on board ship was an officer of the 1st Light Dragoons of the name of Brough, I think, and he died of hemorrhage during the passage. His subsequent general opinion of the head of the femur was practised in one case with much greater promise of success as they all survived the operation for a month or two weeks but one of them lived to be sent home as an invalid. It would out of the 11 cases of amputation at the hip joint not one, scarcely, survived as many have as the others had done. Amputations in the upper third of the thigh are usually so fatal that the French surgeons at hand cut them altogether during the latter part of the war, and even in our hospitals the rate of mortality was so great as not to hold out any very great encouragement.

The following table of operations and results was drawn up when the information on the subject was not so precise as it has since become by the investigation of the Medical Board, and which will be published soon. That it may be received as an approximation

Of computations these were

- 40 at the shoulder joint of which 15 proved fatal
- 139 of the upper arm ... 28
- 63 Fore arm ... 3
- 221 of humerus & scapula heads ... 2 some made the scapulae
- 9 Hip joint ... 9
- 44 Upper third of thigh ... 38
- 47 Middle third do ... 40
- 62 Lower third ... 37
- 2 Both thighs ... 2
- 106 Leg ... 37
- 12 Ankle joint ... 2
- 29 Tarsus Metatarsus & toes ... 1
- 7 Knee joint ... 4
- 1 One foot & one leg ...
- Episioria
- 14 Head of humerus ... 2
- 16 Elbow joint ... 2
- 1 Head of humerus part of scapula ... 1
- 3 Head of radius & ulna ...
- 6 Head of femur ... 5
- 1 Knee joint ... 1
- 2 Proximal of femur ... 2
- 2 In tibia ...
- 1 End of fibula ...
- 3 Part of tibia ... 1
- 1 Amputation shoulder joint & middle of thigh
- 2 Amputation thigh & one arm

The average statement of sickness and mortality in one Division of the French Army encamped on the Plateau in part of Sebastopol during the month of Feb^r 1856 and the admissions and deaths in the Saratovian Army, when contracted with two Divisions of our own Army for the same period were selected for their approximation in point

of numbers will I think give a favorable impression of the state of health the British Army then enjoyed

Return of the Sick of "One Division" of the French Army - During the Month of February 1856

Effective strength 9000 Men -

Principal diseases	Remains admitted and of January	Admitted Feb ^r 2nd	To Duty	To Invalidity	Dead	Remaining 29 Feb. '56
Typhus Fever	4003	2491	480	1519	457	4038
Scarlet						
Saratovian Army 17000 strong Feb. 1st		1537			44	1088

Admission to strength - 27.67 per Cent
Deaths .. 5.07
Sick .. 35.84

3^d at beginning - 44.86

Return of the Sick of "Two Divisions" of the British Army - For Month of February 1856

Effective strength 11,710 men

Principal diseases	Remains admitted at the end of January	Admitted Feb ^r 1st	To Duty	To Invalidity	Dead	Remaining 29 Feb. '56
Fever	479	667	708	96	2	340
Scarlet						
Diarrhoea						

Admission to strength 5.70 per cent
 Deaths " " 0.01 " "
 Remaining one of the week 2.90 " "
 Beginning of 2 4.09 " "

The following table gives the admissions and deaths under each head of Disease during the whole period from April 1854 to July 1856

Disease	admitted into field hospital	admitted into camp	Deaths
Fever	31204	12794	43397
Erythraemic Fever	29	44	73
Typhus of the Peninsula	12582	6028	18610
Dysentery of the Intest	266	408	674
" Liver	1187	389	1576
" Hemorrhoidal	55765	7153	72918
" Brain & Nervous System	796	303	1099
Dysentery of the Intest	6918	932	7850
Rheumatic Affections	5131	267	5398
Phlegmons & Abscess	12542	1315	13857
Venereal Complaints	3717	2022	5739
Ulcers & Fomental Diseases	269	140	409
Wounds & Amputations	18283	8105	26388
Pneumonia	1773	52	1825
Heart Disease	2398	1120	3518
Lung	2096	728	2824
Diseases of Eye	3317	1123	4440
" Skin	749	190	939
Other Diseases	3371	2031	5402
Total	162,013	55,511	217,524

It is not necessary I should enter further into these details here, as they will be given fully in the Medical history of the war which is now in course of preparation. I may however be permitted to send a copy of my table to Sir John & if all observations on my remarks on that part of his

and Sir John's Report which related to the Medical Department of the Army in the Crimea.
 Copy - W. Home Jones Esq. High Wycombe
 8 October 1856.

Sir
 I have been favoured with a copy of your letter of the 23^d August to the Sec^y of State for War in reply to my observations on the report of the Commission on Supplies in the Crimea of which you were President; and as this letter has been the medium of any further correspondence on the subject, now that the business of General Officer has closed, it is almost certain you will permit me to address you direct, and send out one or two papers in your letter, where it appears to me you have taken much appreciation, my meaning, or the information furnished to you has been

your State. "It is to be desired, however, that Sir John Hall has not mentioned at what date he sent Dr. Forrest to Santoni in the particular service, whether he has given a copy of the instructions with which that Officer was no doubt entrusted for his guidance, in the performance of this urgent, and important duty, which had been specially intrusted to him by Sir John Hall. In absence of that information it appears to me that the Inspector General cannot leave the matter precisely where it was before they were made. But had you read my remarks you would have found that at least I have stated that when Dr. Forrest's Inspector General of Hospitals Dr. Forrest was sent to Santoni in December 1854, to assume the duties of Principal Medical Officer of the Station, he was specially charged by me to seize the despatches of the stores which he knew he stood so much in need of; and, surely in his position, vested with the power, and authority of Principal Medical Officer of the Station I had a right to say

if any one would stimulate the abolition, & thereby to activity he was the person, and herein his responsibility naturally expected the arrival of the business daily, and did not think of sending any one of mine back down on the same errand.

No written instructions were given to Dr. Forest on the occasion, nor were they considered necessary at the time: but had I been summoned before the Board of General Hospital at Chelsea I should have called him as an evidence to prove by viva voce testimony the correctness of my statement, which you seem to doubt. I should also have summoned Mr. Alexander, & some others touching the evidence they gave before your Commission, but that is foreign to my present purpose.

In your letter to the Minister of State in Paris you mention that the accuracy of my statement regarding the quantity of Quinine in Camp was never questioned, and that it was substantiated by the evidence of Sir Hernandez the Apothecary: Whereas in your letter to Lord Raglan of the 27 April 1855 you state that I had made a hazardous statement about it, and this part of your correspondence you publish without inserting my reply, and explanation thus giving an impression much more unfavorable to me than any thing the publication of the whole correspondence could possibly have done: For what ever opinion Lord Raglan might have entertained at one time for thousands of Quinine as a temporary supply, no one who knows any thing of the drug could have felt any serious apprehension on the subject, with that quantity actually on hand, when the fresh supply arrives: it; for it must be borne in mind that my return

was made out near the close, and not at the commencement, of the period of supposed scarcity: and though you place much stress on Lord Raglan's having sanctioned the receipt of a Dispenser of Medicines to Louisa, no advantage was really gained by the presence, at the subject, which had previously demanded, around the day after his departure from the Crimea, and it would have arrived a week before had not an accident happened to the machinery of the steamer on board of which it was shipped.

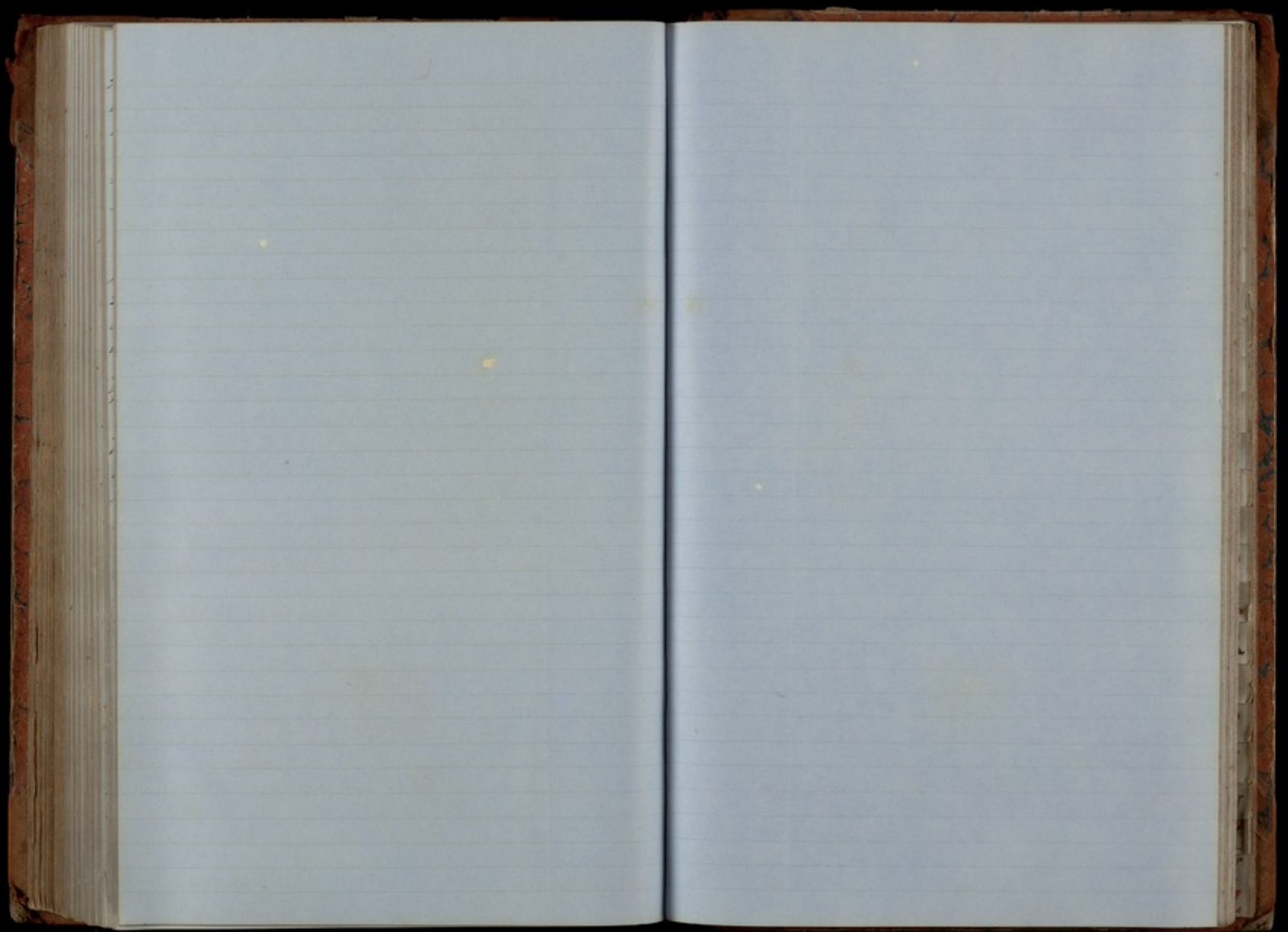
You express surprise at my not having furnished a copy of the original official letter of the 15 June 1855, but surely you cannot feel this, as you must know that no authority to make use of an official communication addressed to you. It was that feeling which emboldened me, and not a wish to suppress the document, as your letter infers. On the contrary Lord Raglan's letter calls attention to a point, which would have afforded me an opportunity of proving, had an enquiry taken place that this was not a solitary instance where certain medical officers did nothing to and themselves, and would embarrass me.

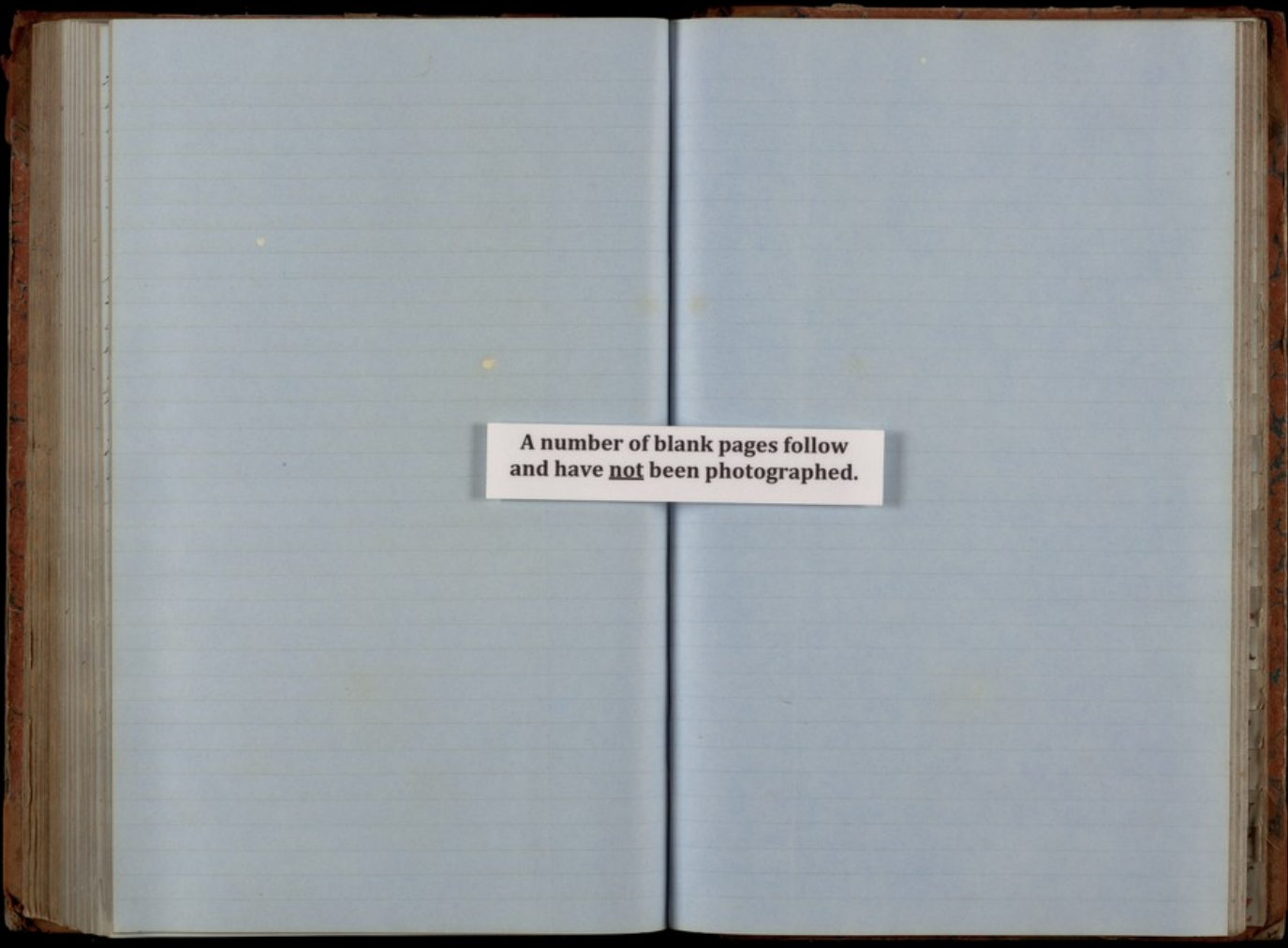
I know no reason why you should entertain any personal hostile feeling towards me, and should be unwilling to substitute such an opinion.

You could only judge by what was stated by you by individuals without knowing the circumstances which prompted them to make their statements; and as an opportunity was afforded me, or any one else was afforded of giving explanations, or correcting erroneous impressions many statements were received as evidence that would not have borne investigation and could your printed report afford to have known what had been stated by others.

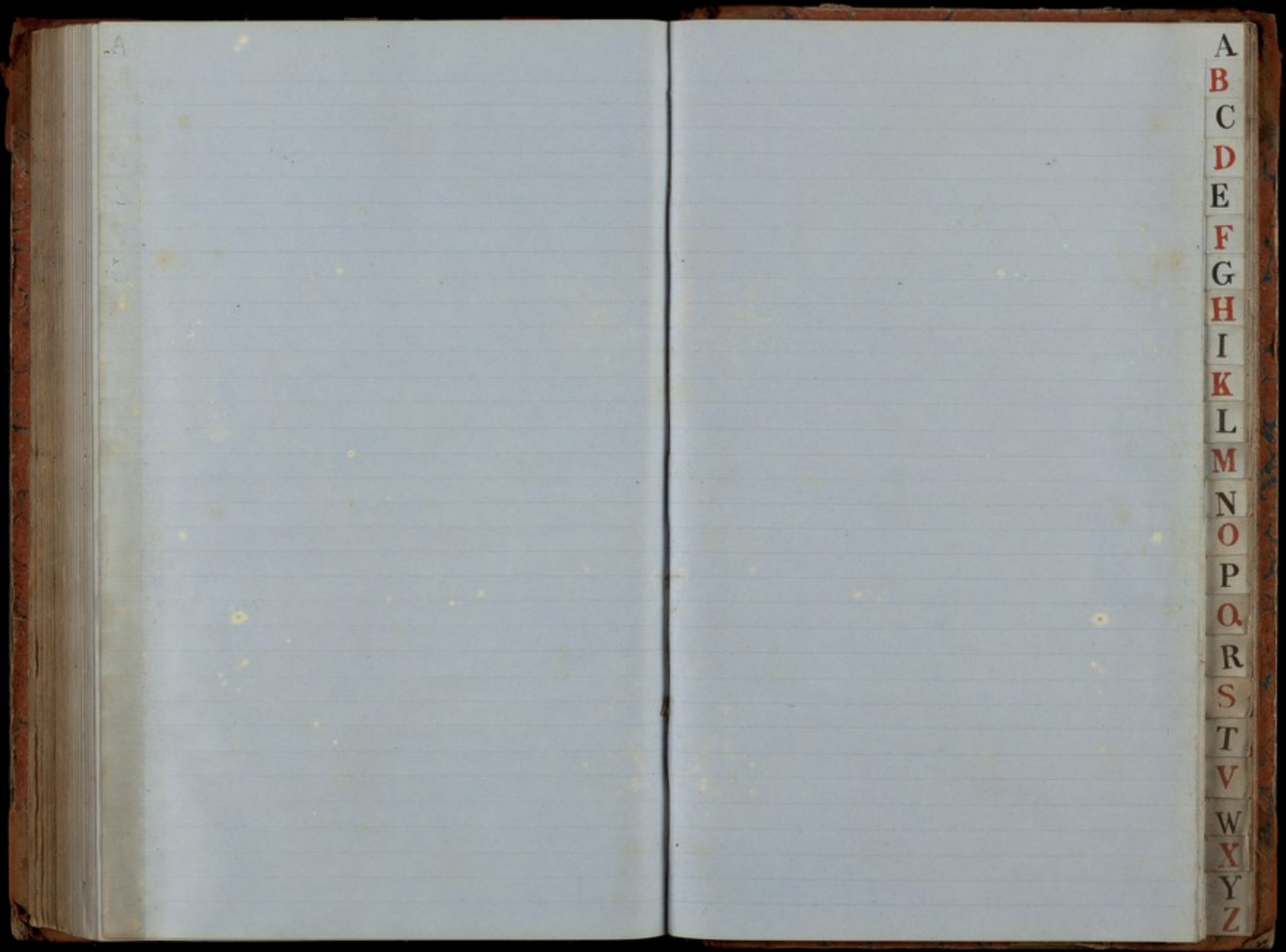
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John Smith, M.D. &c. &c.
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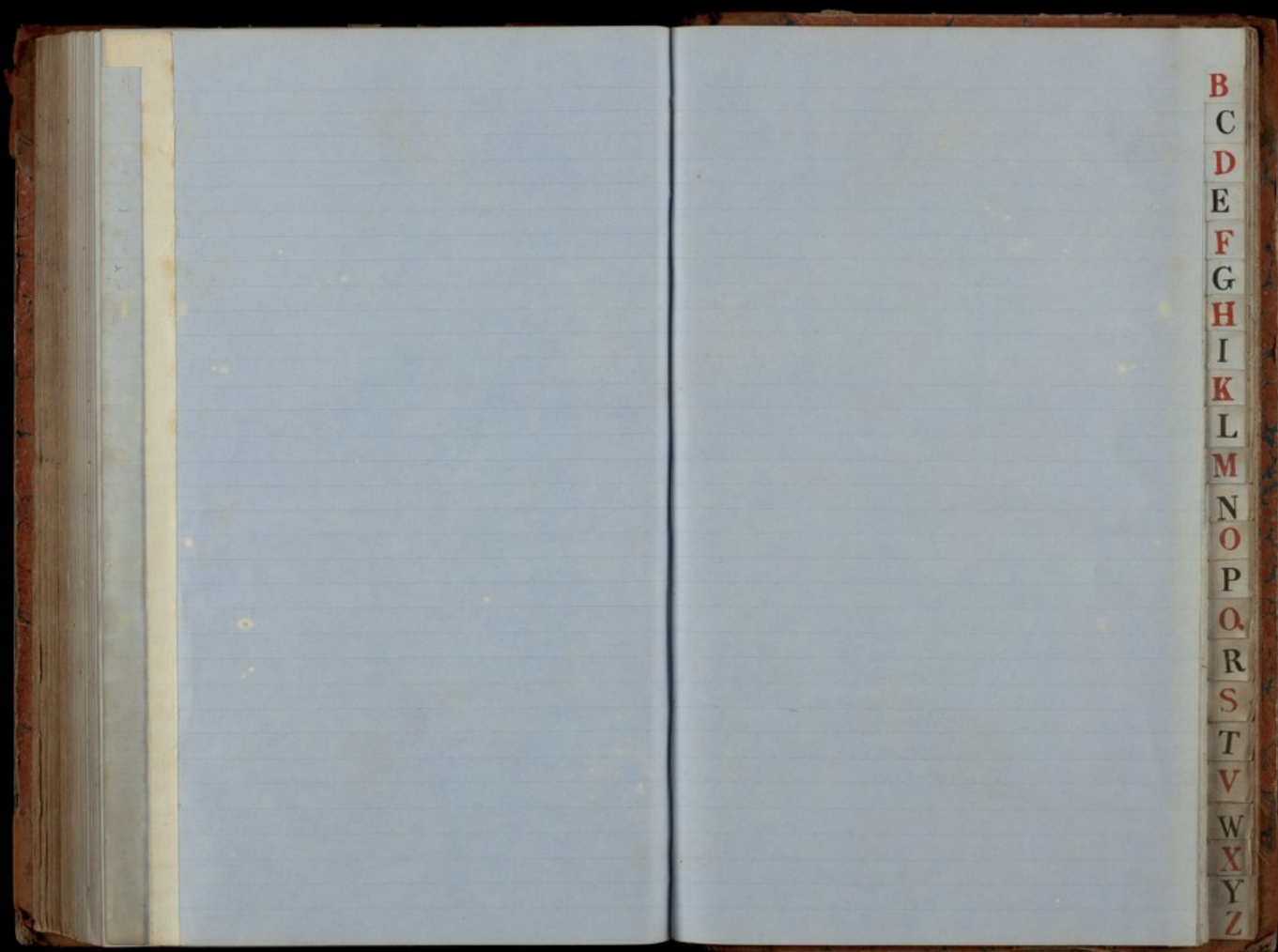


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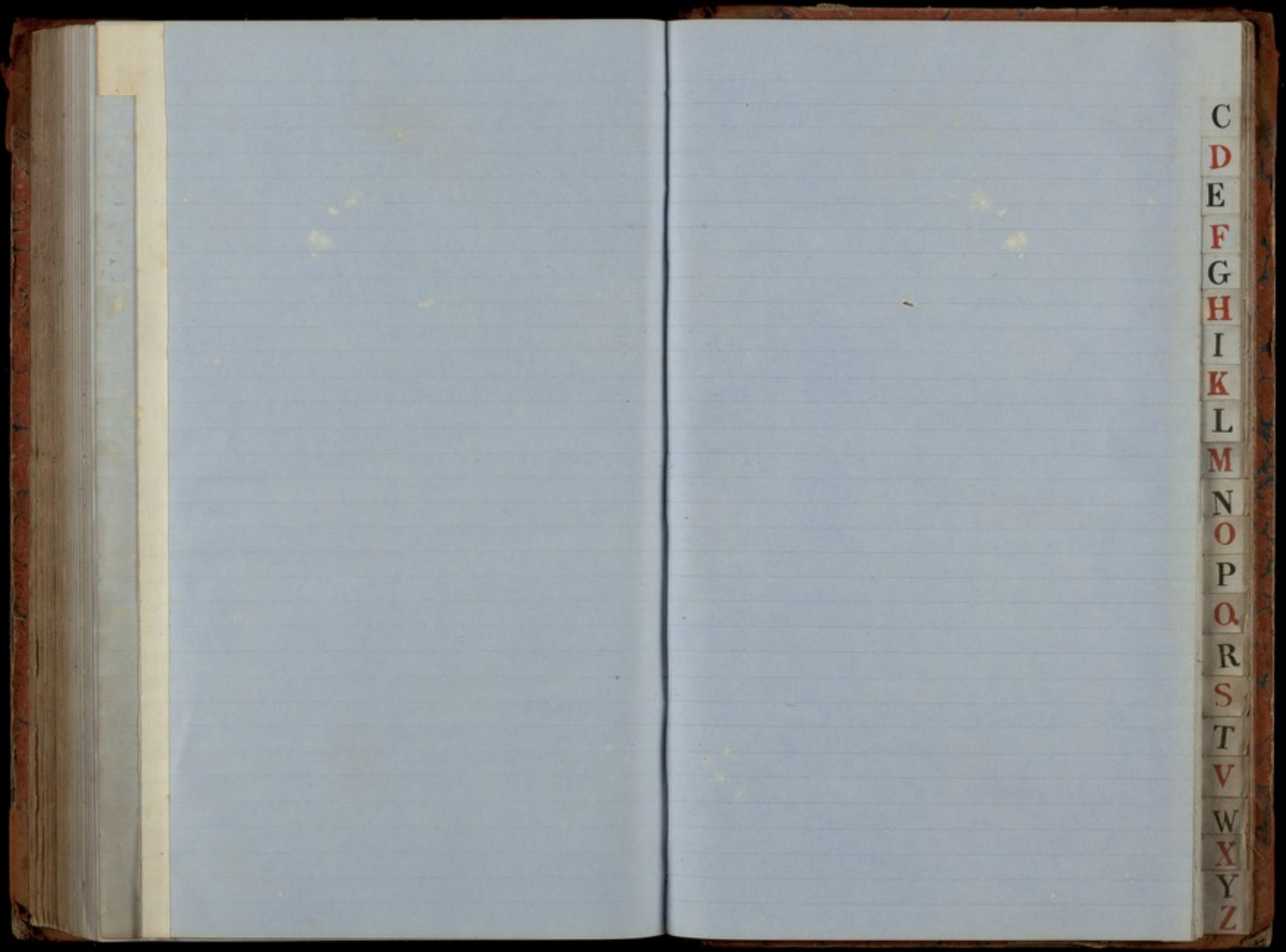


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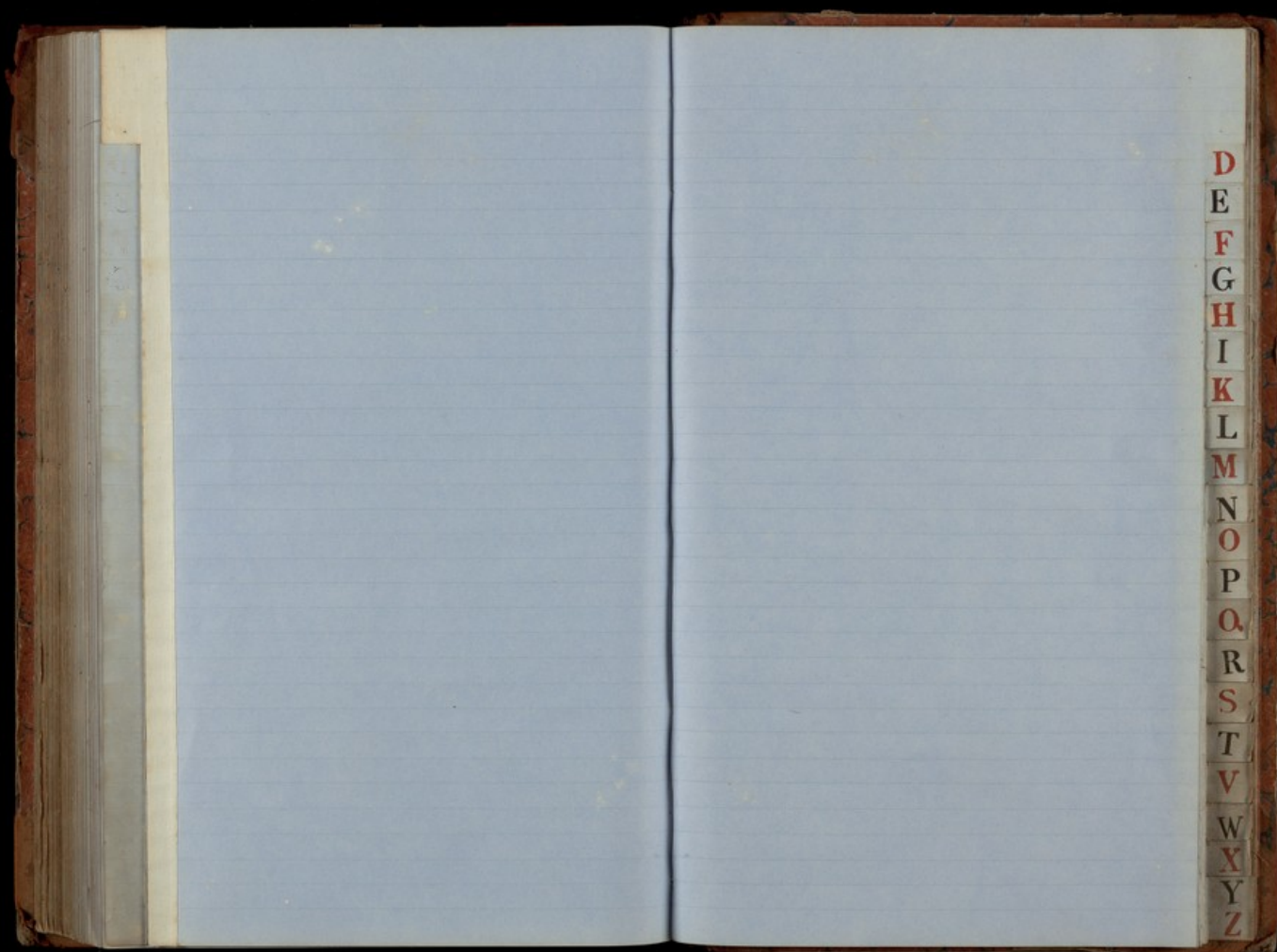
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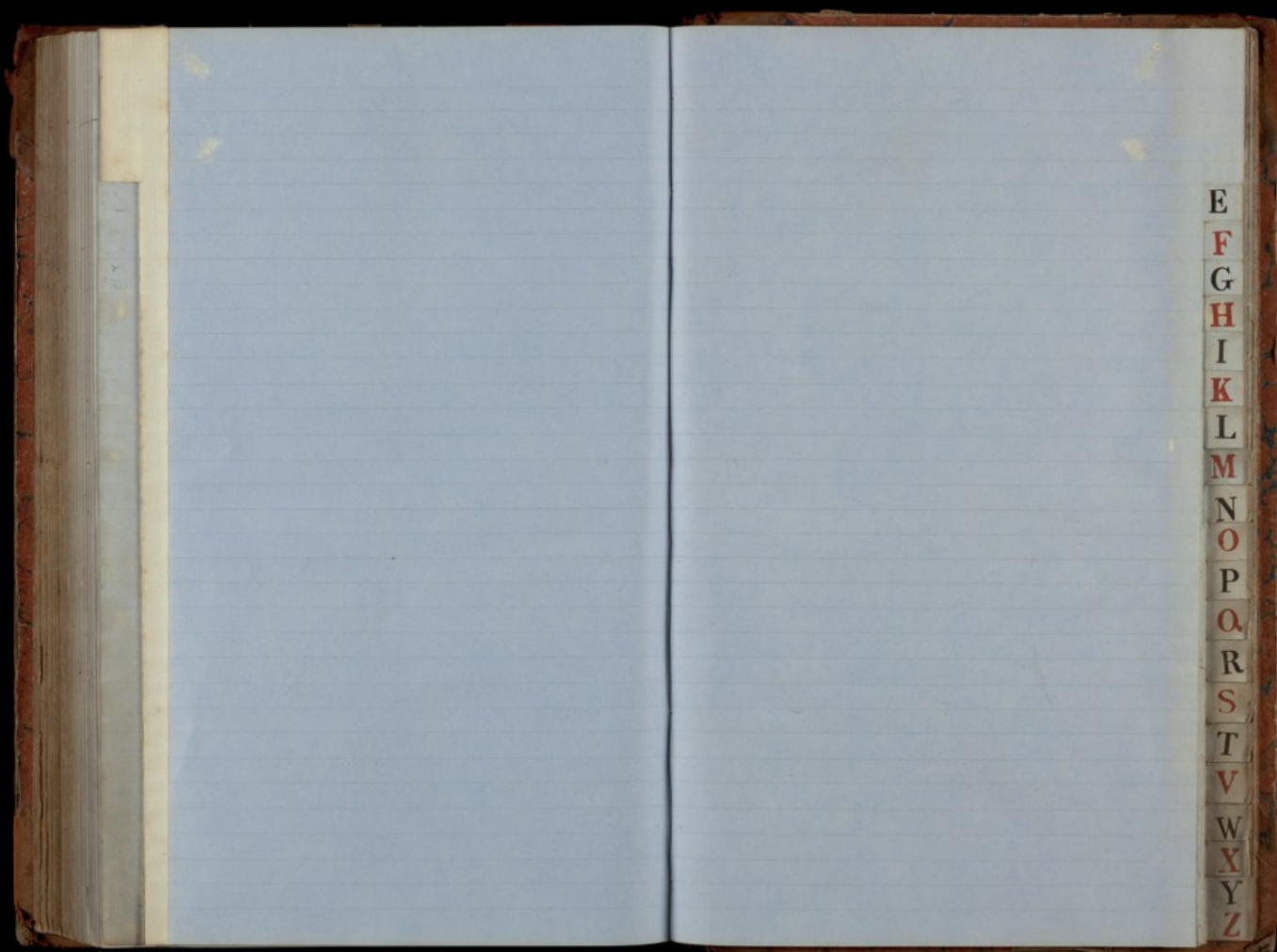
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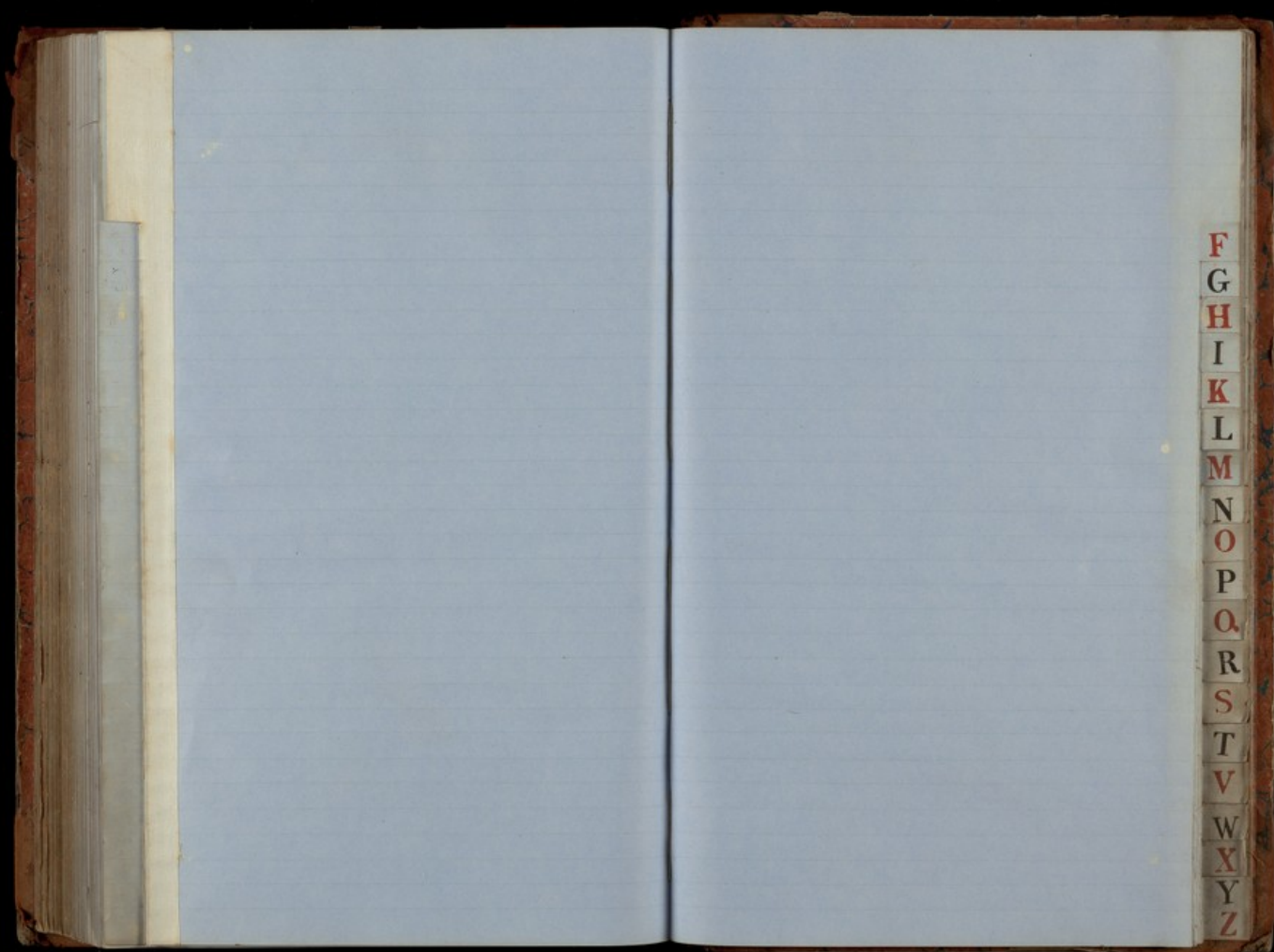
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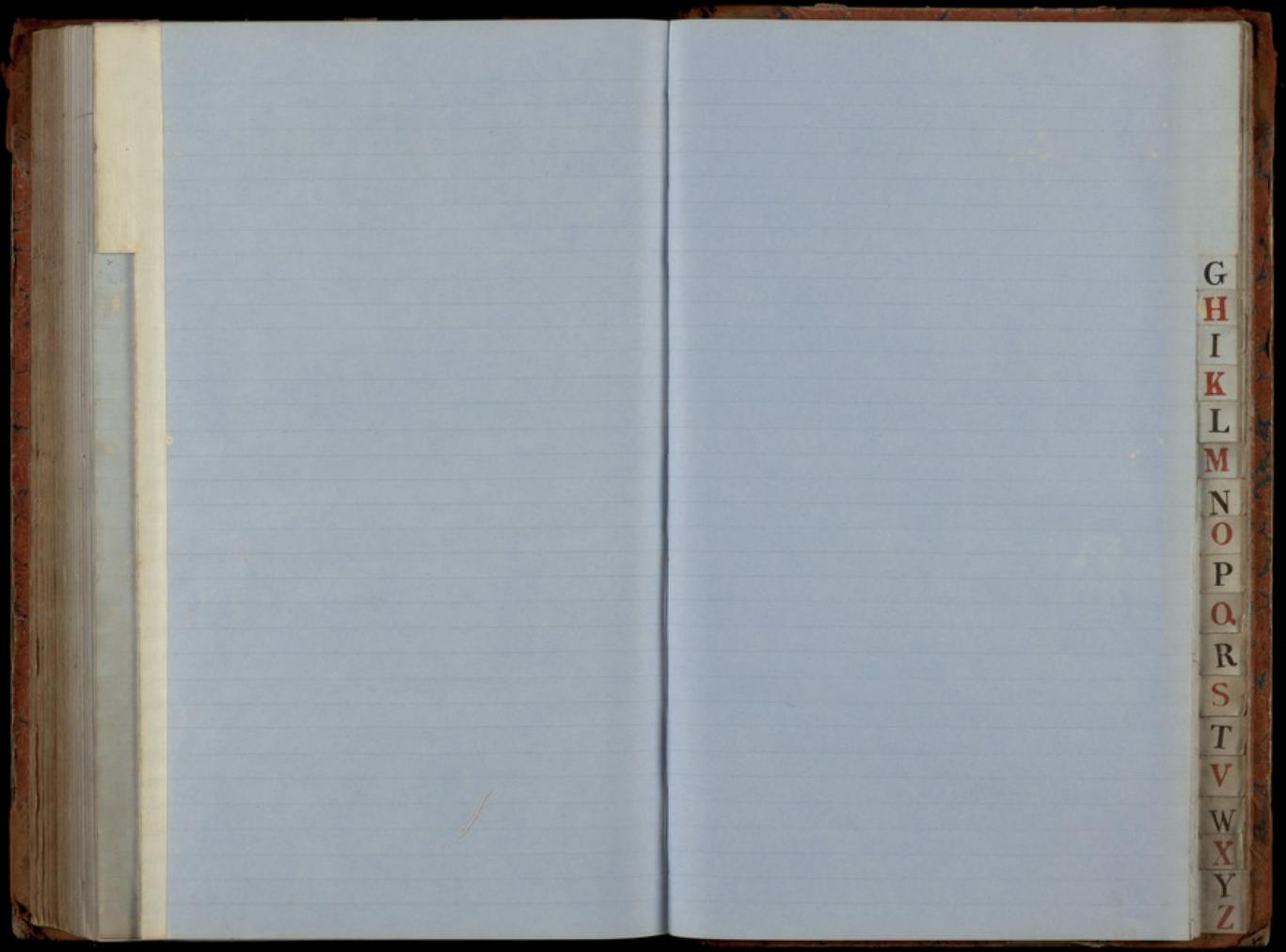
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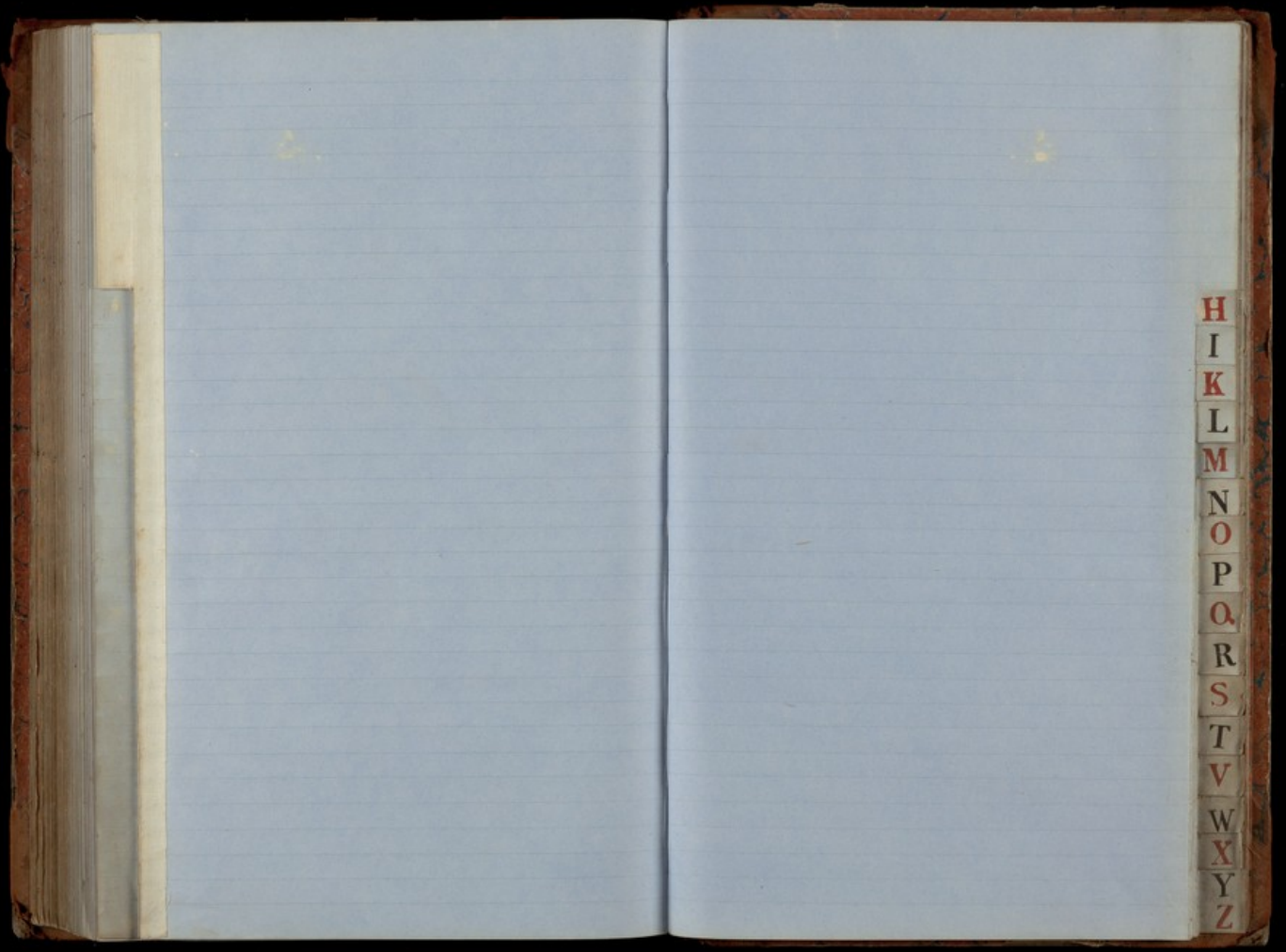
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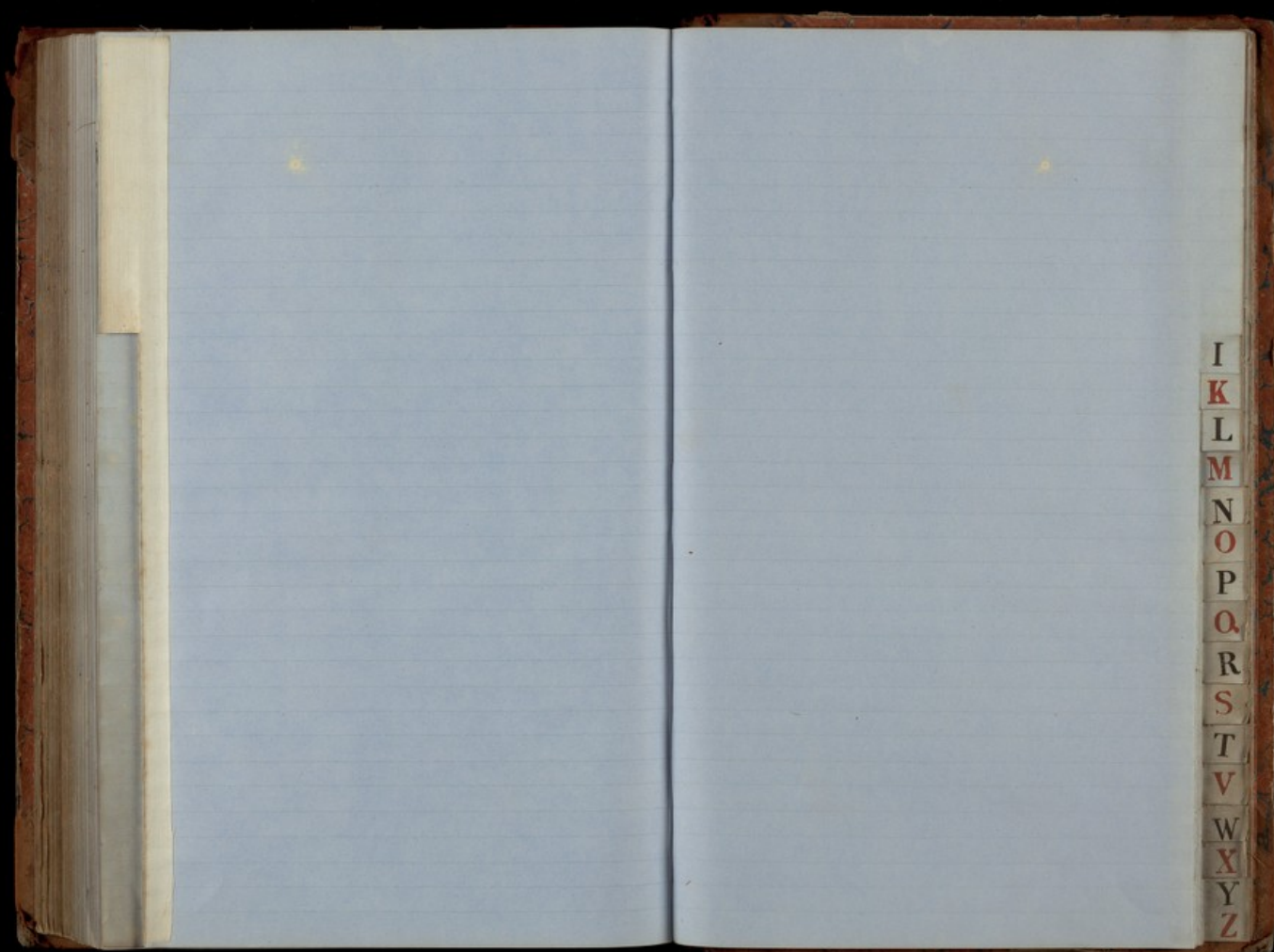
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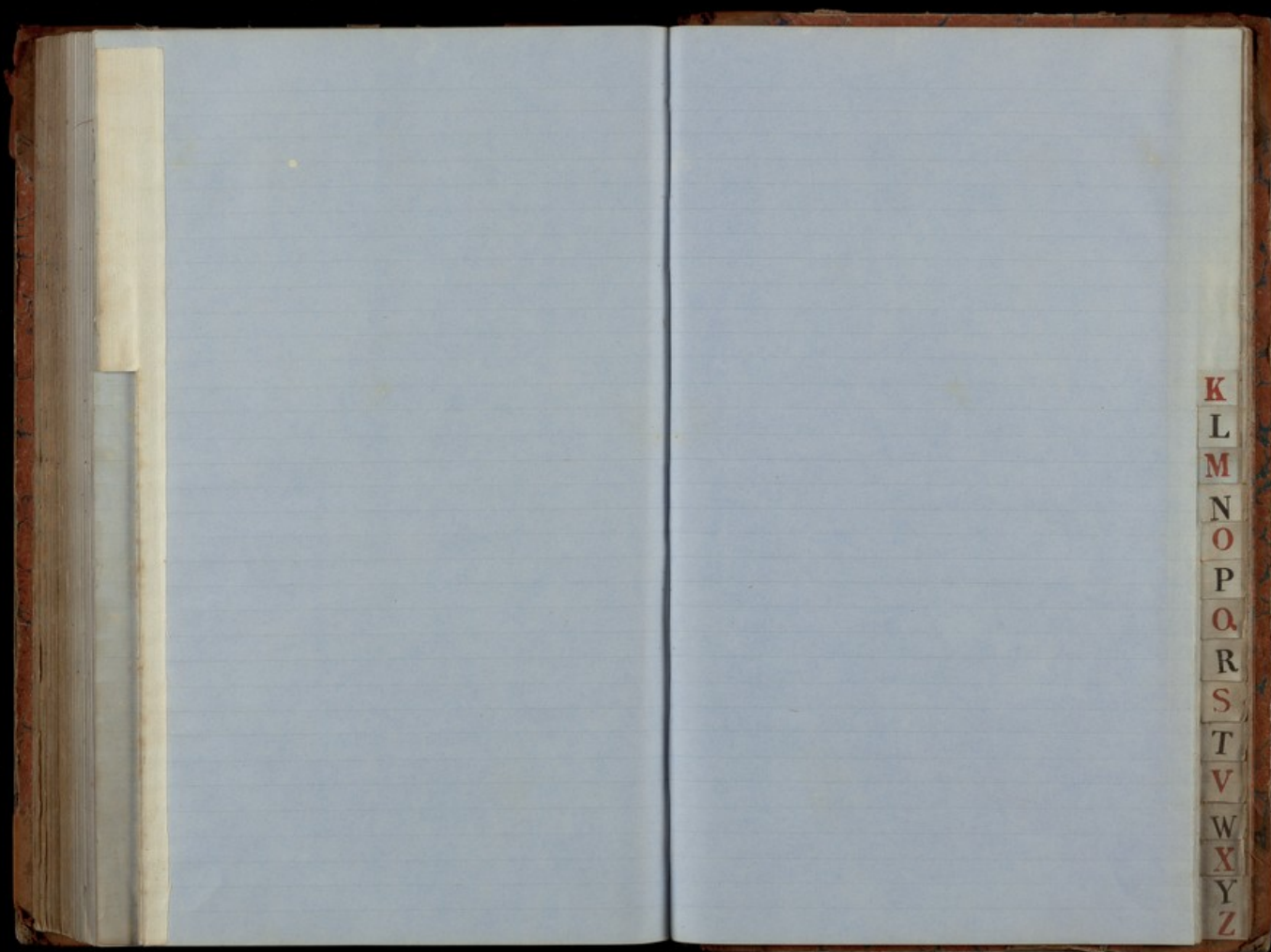
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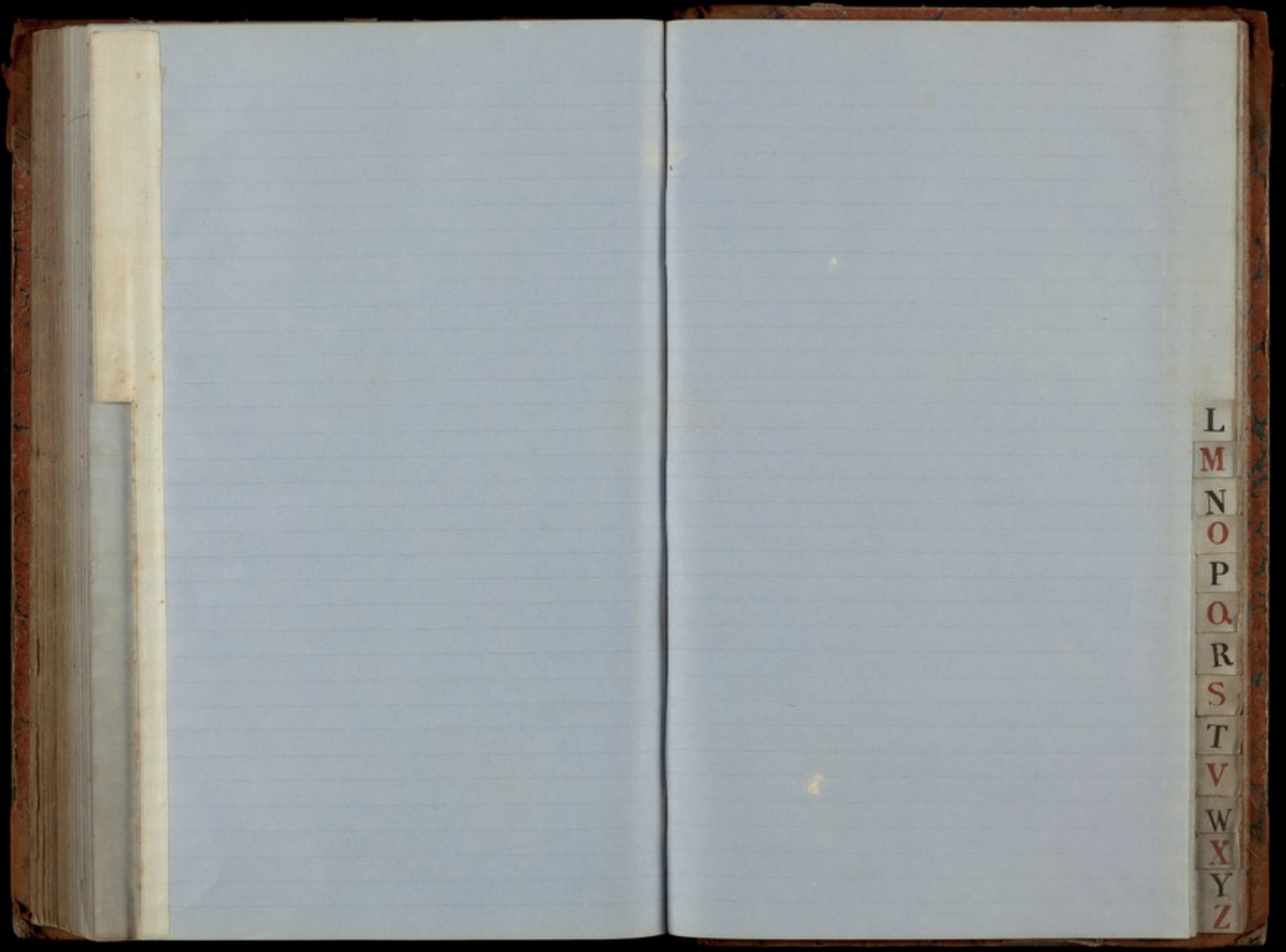
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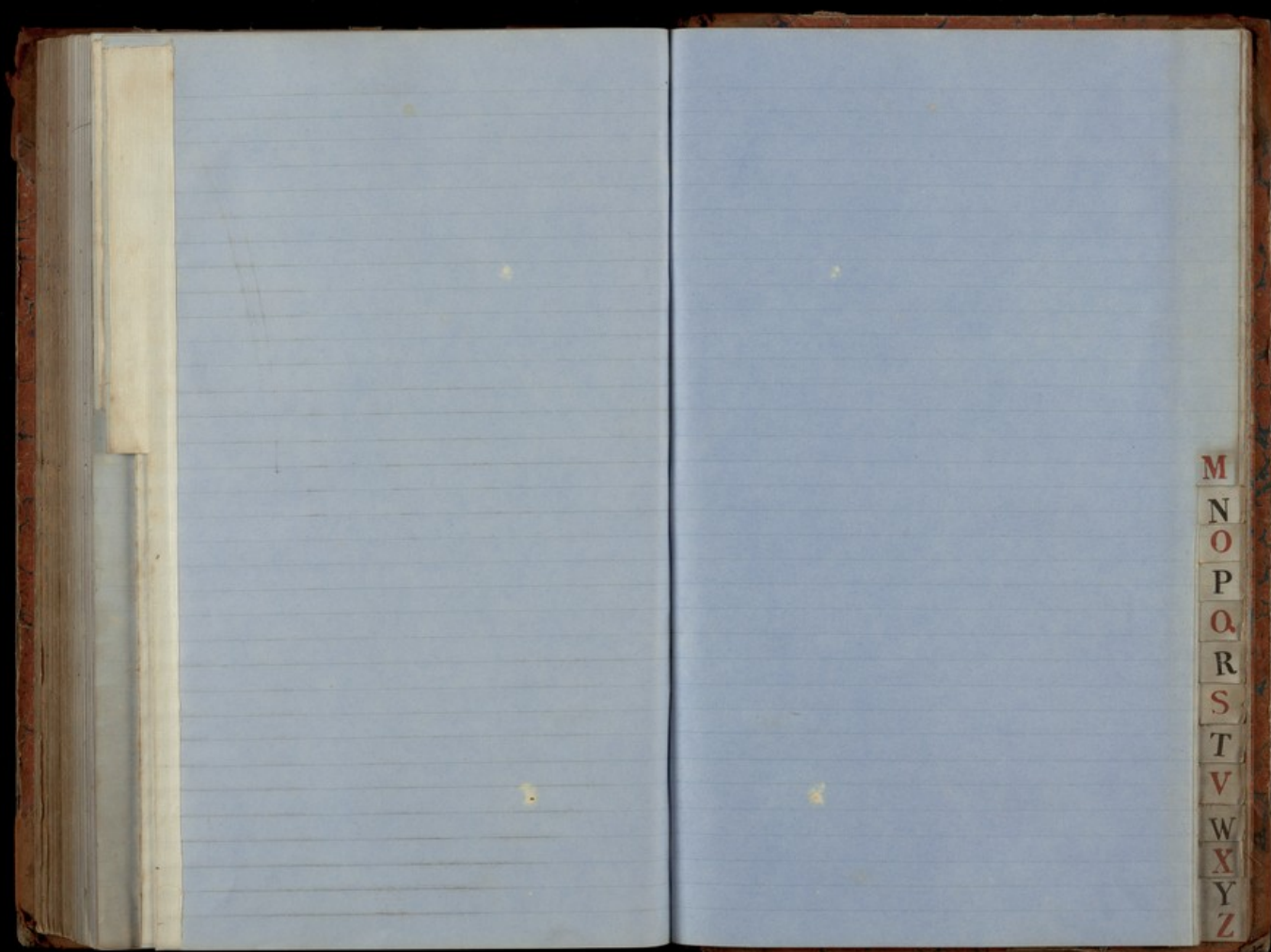
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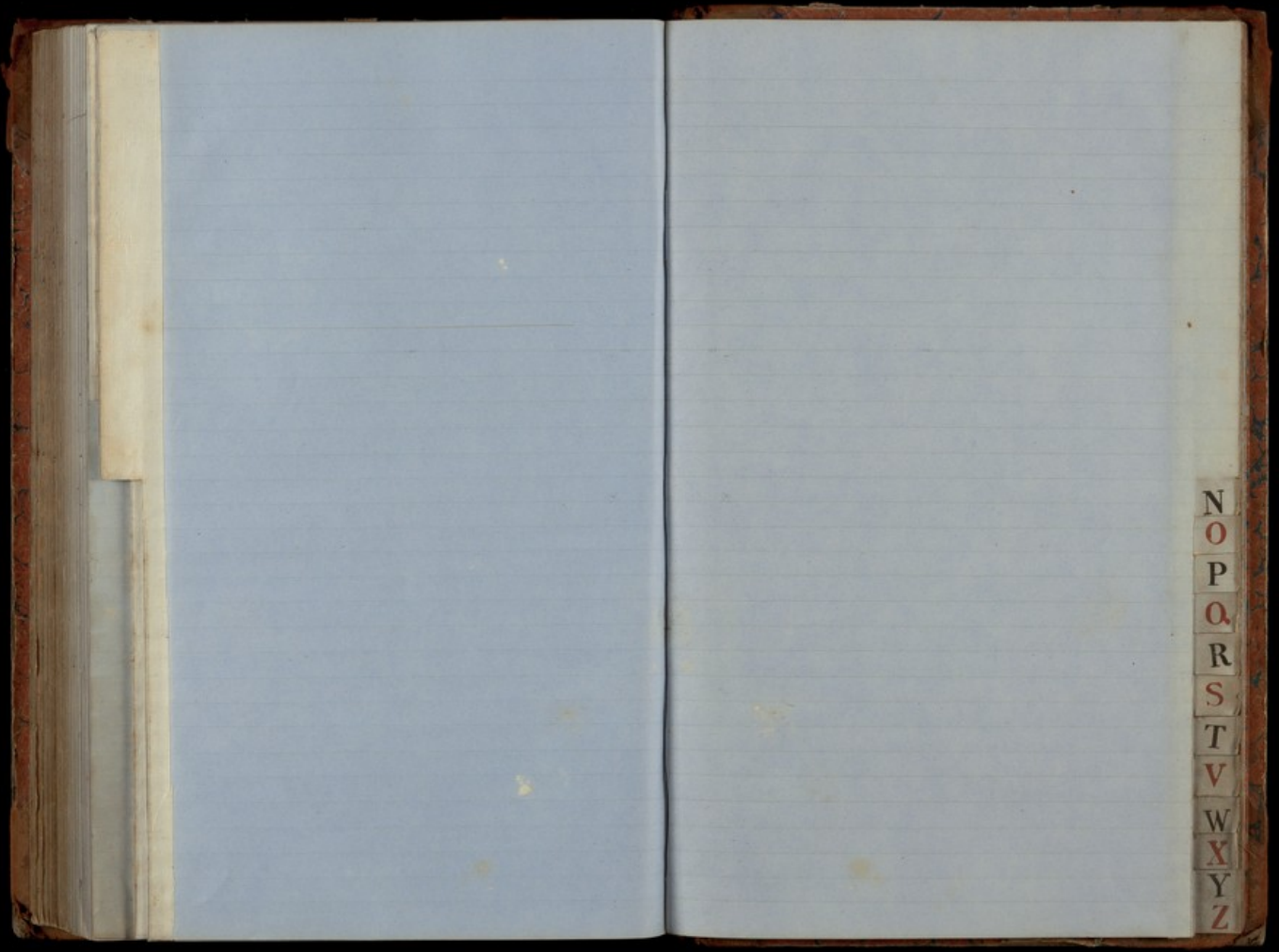
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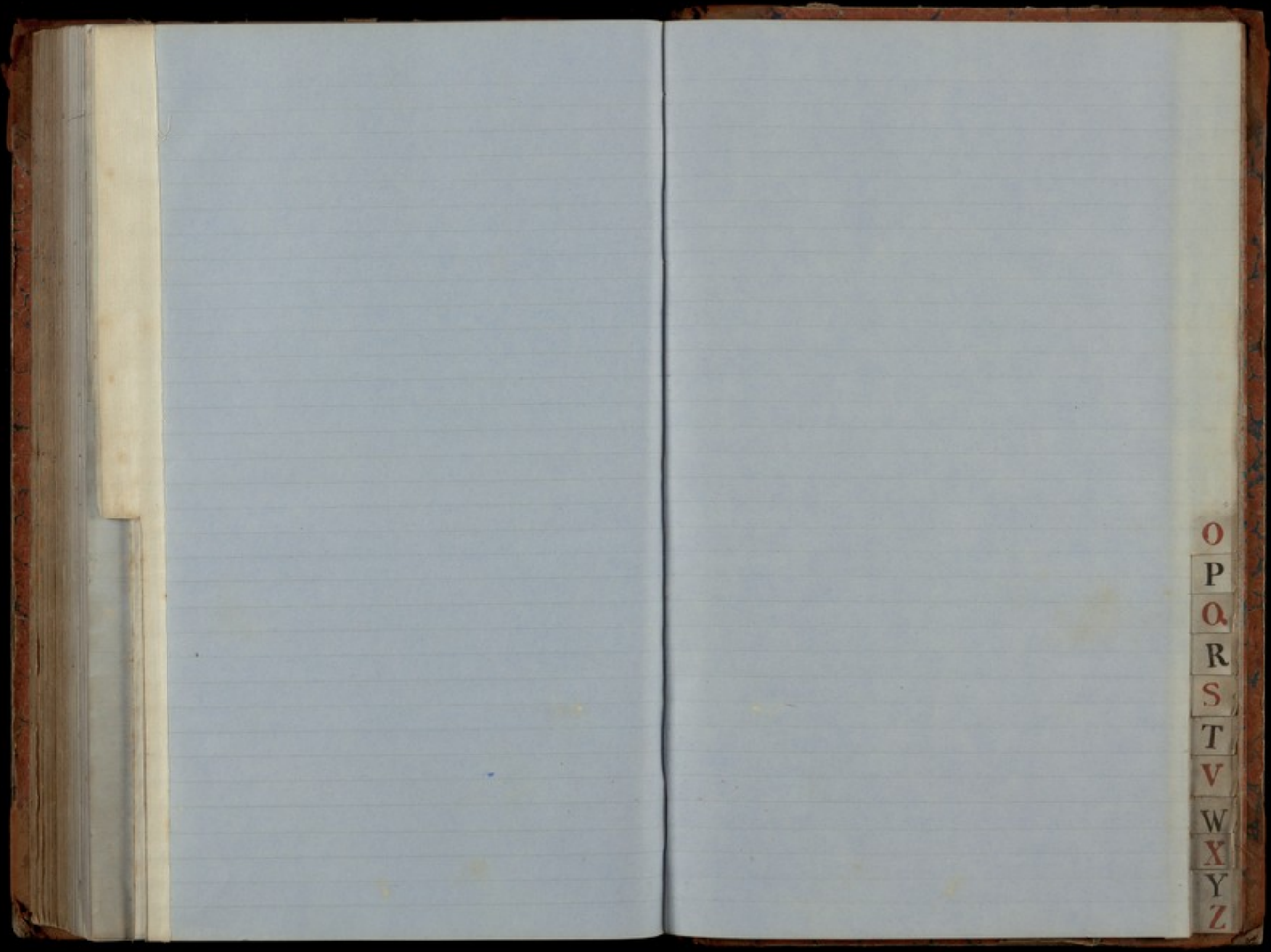
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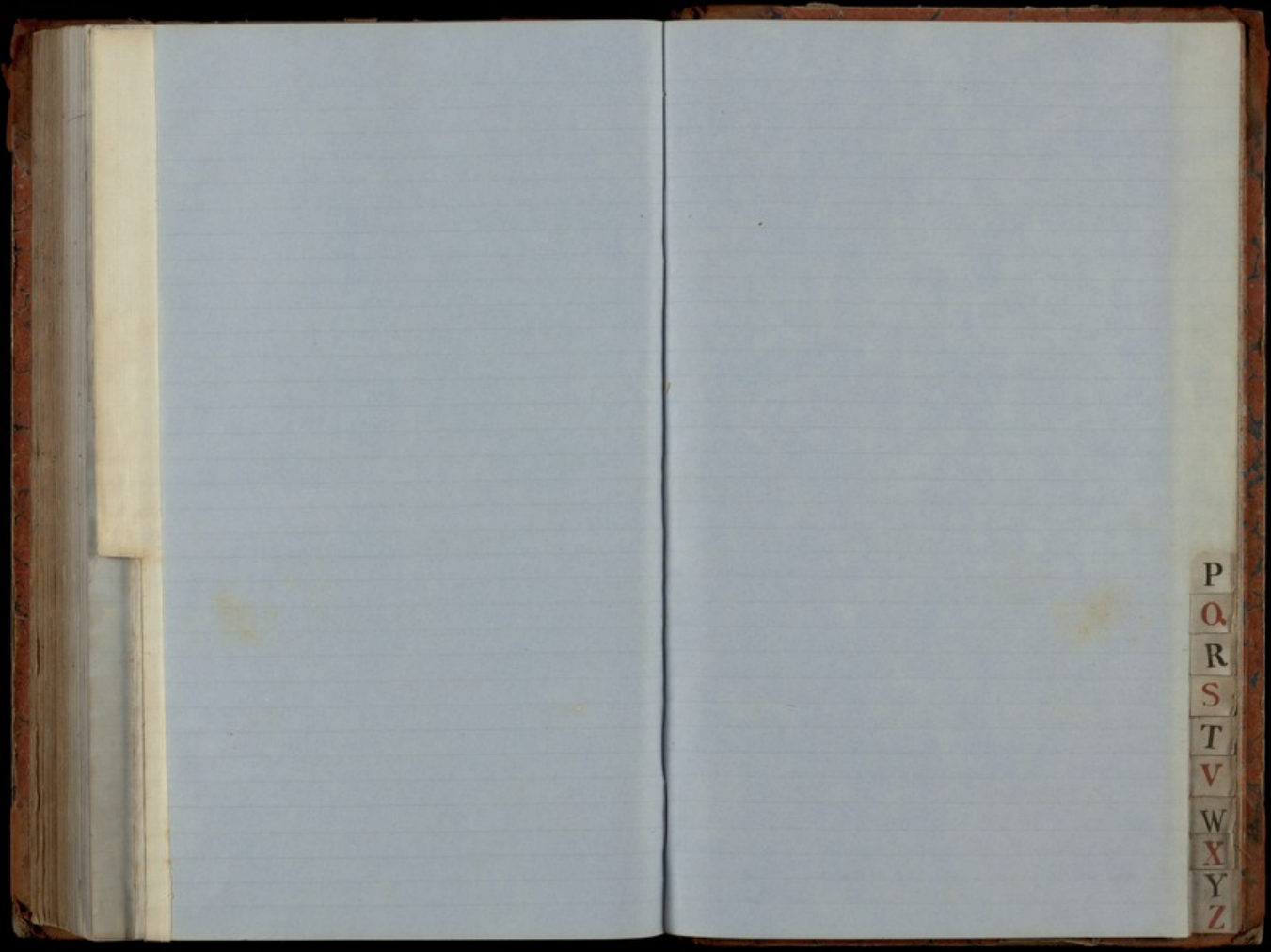
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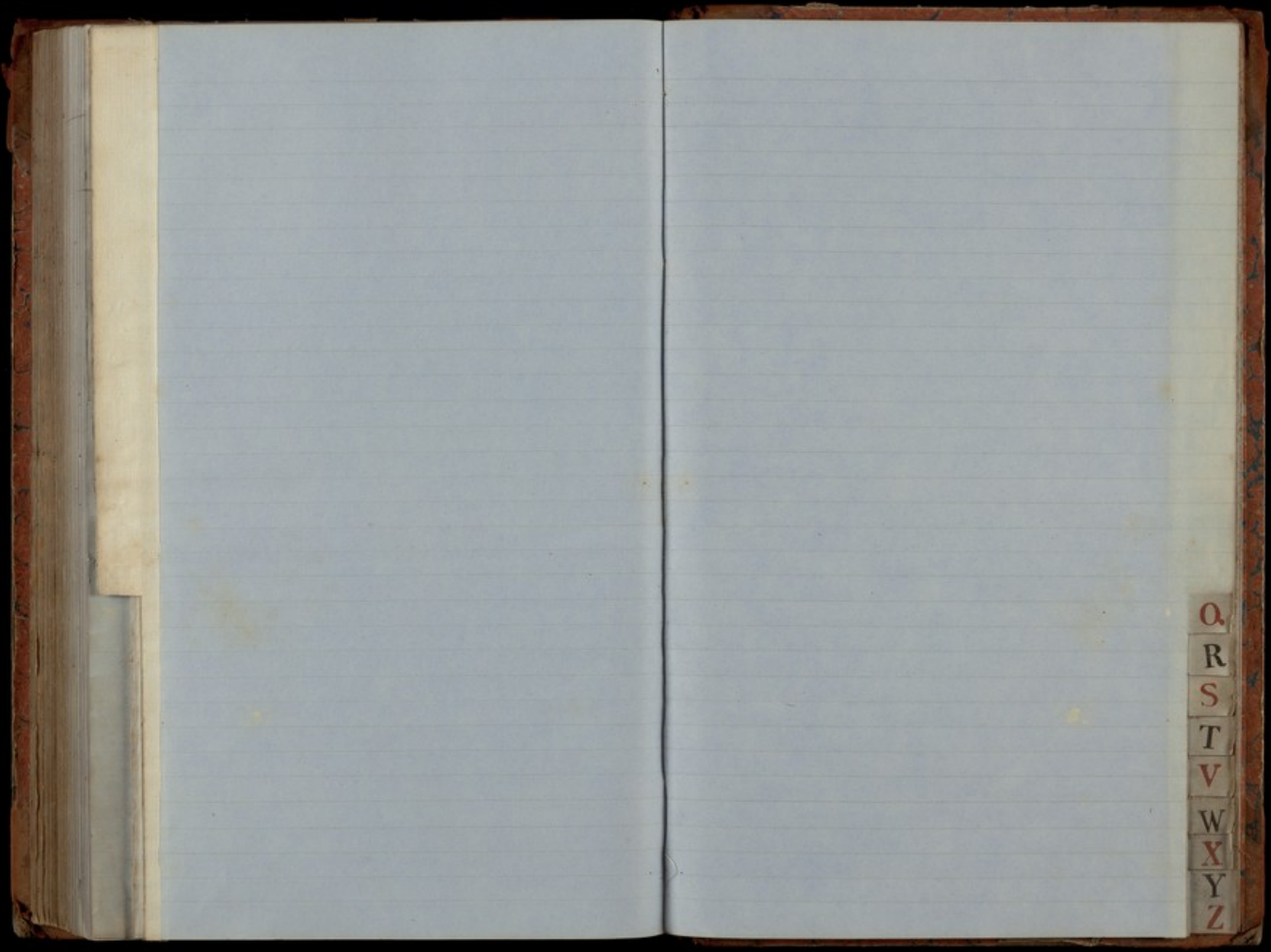
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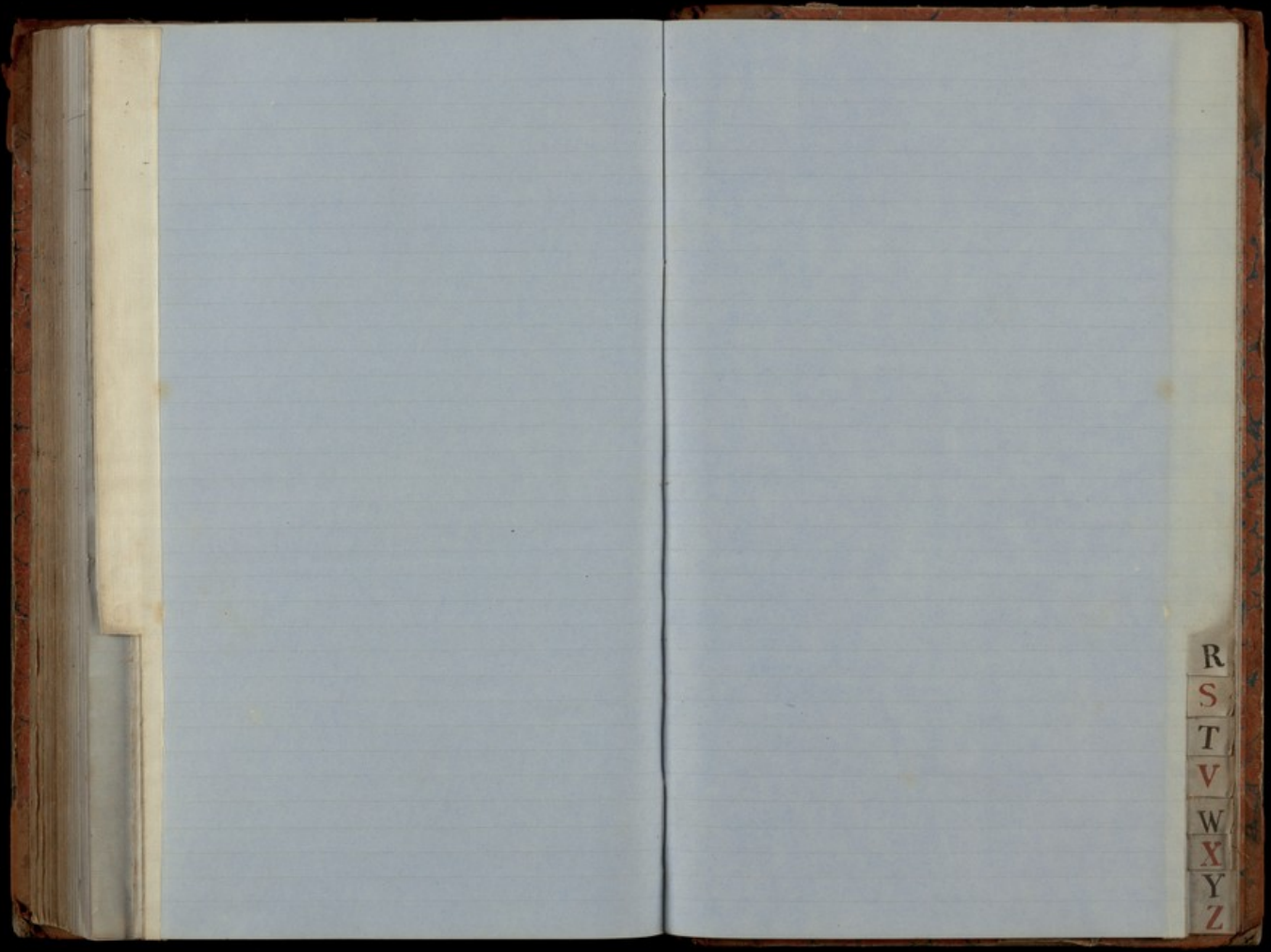
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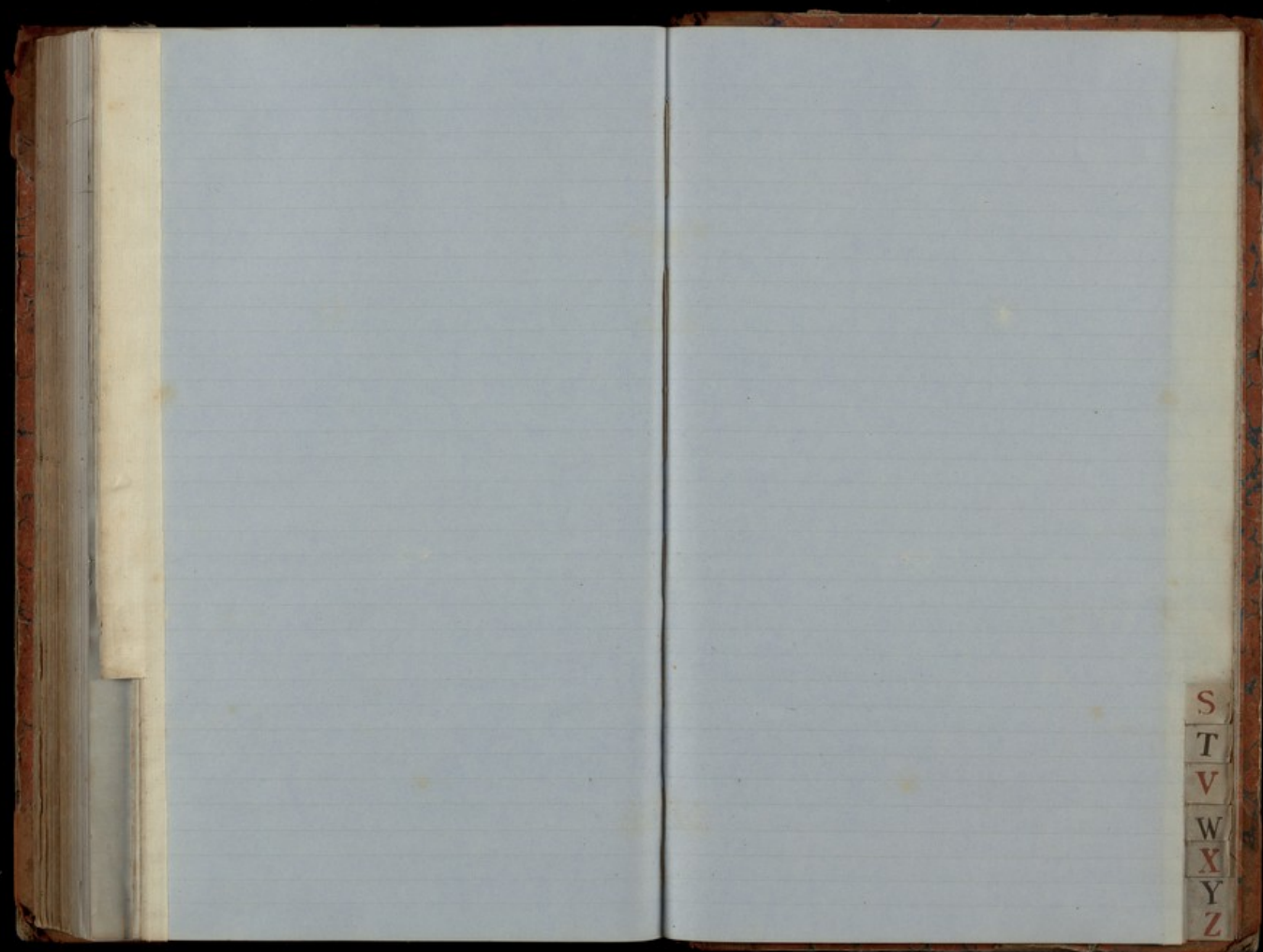
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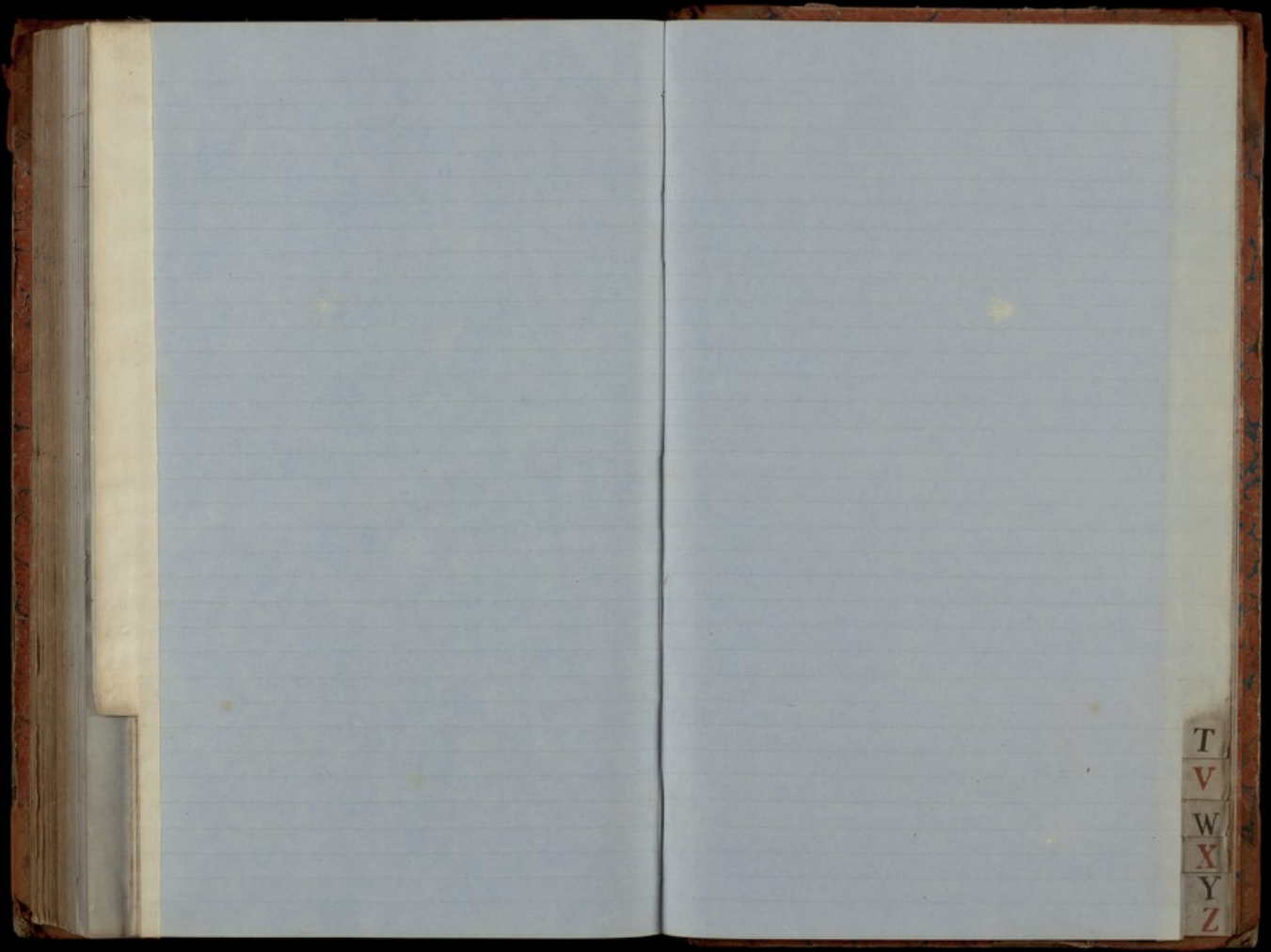
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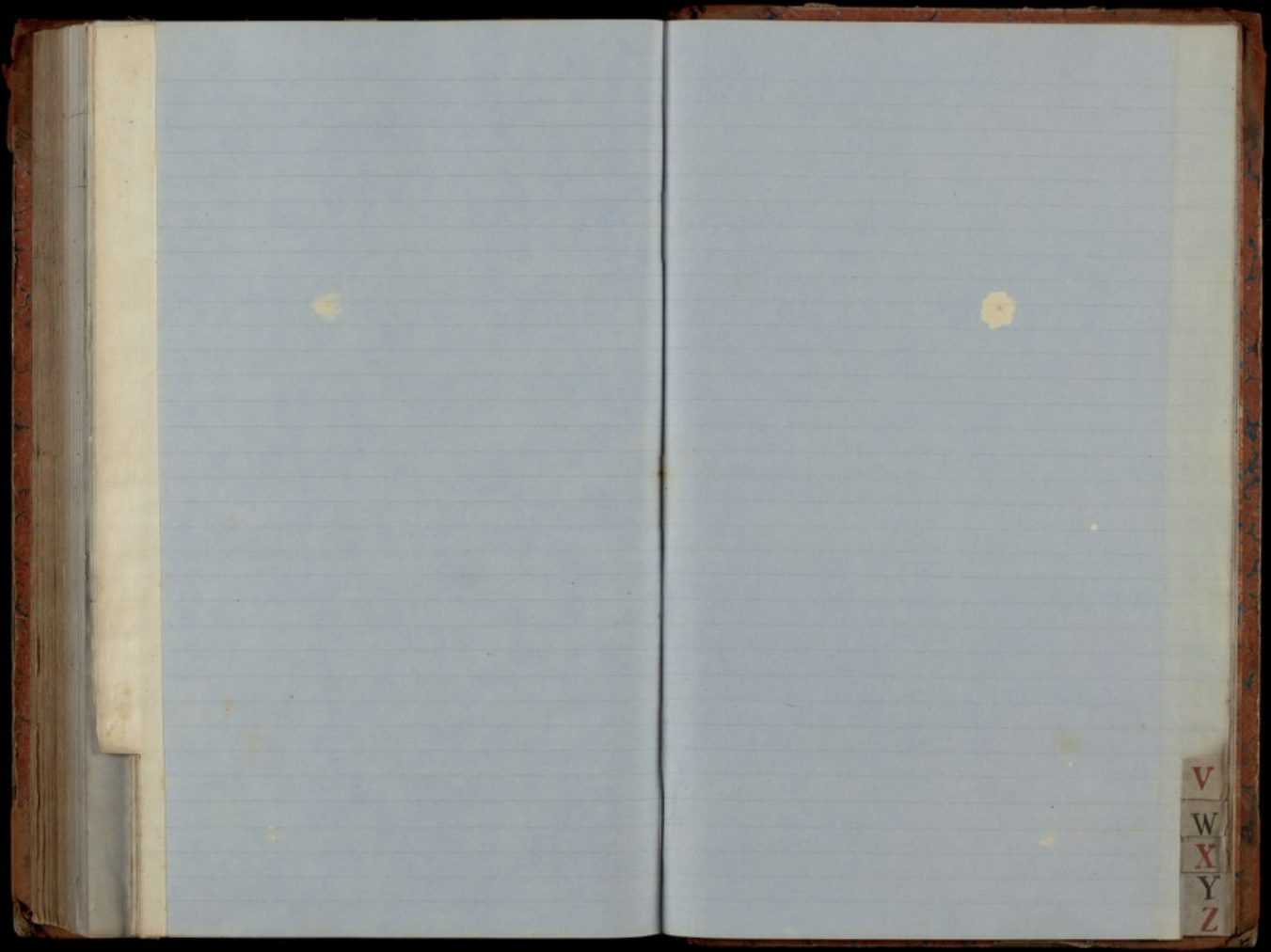
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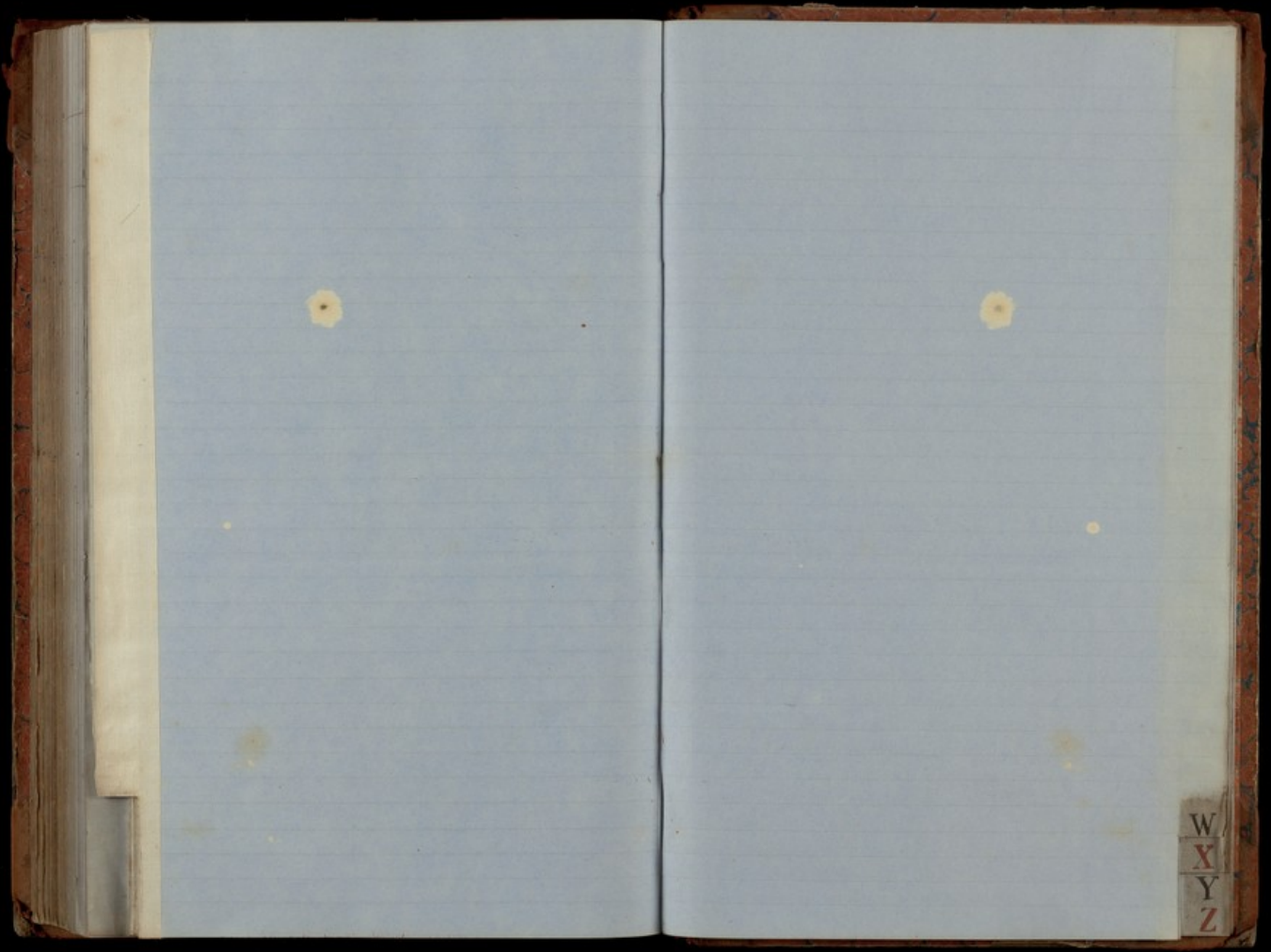
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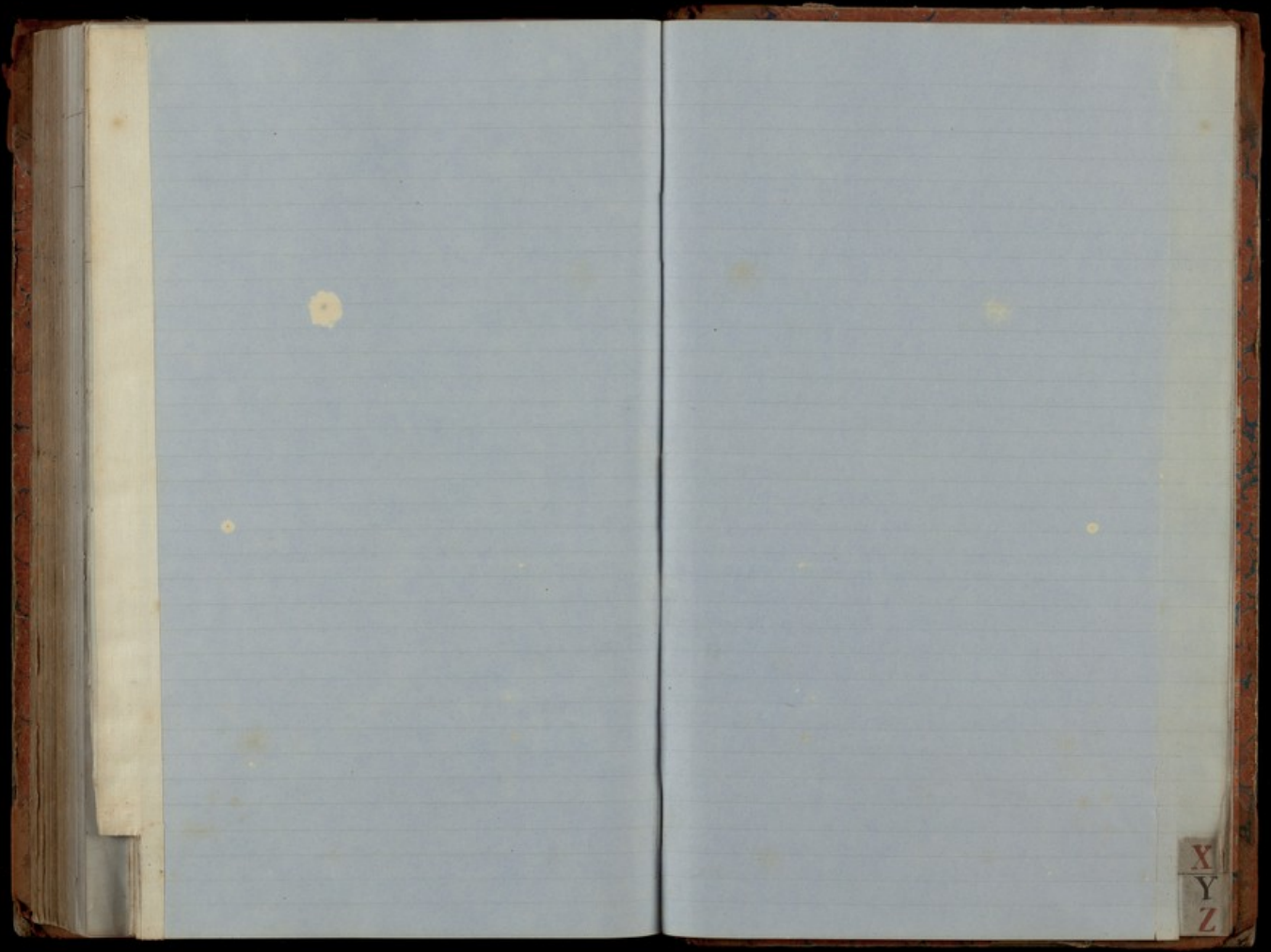
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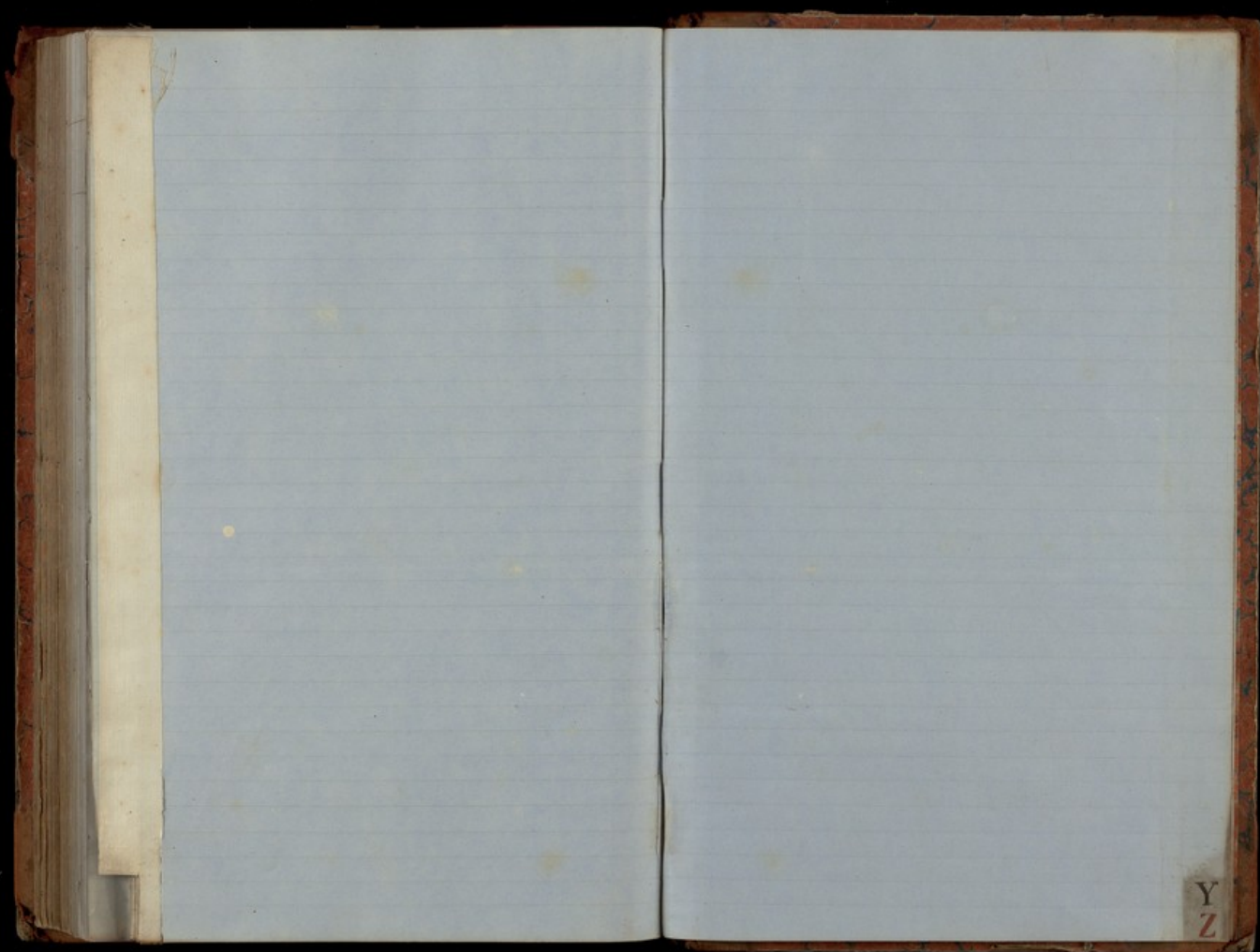
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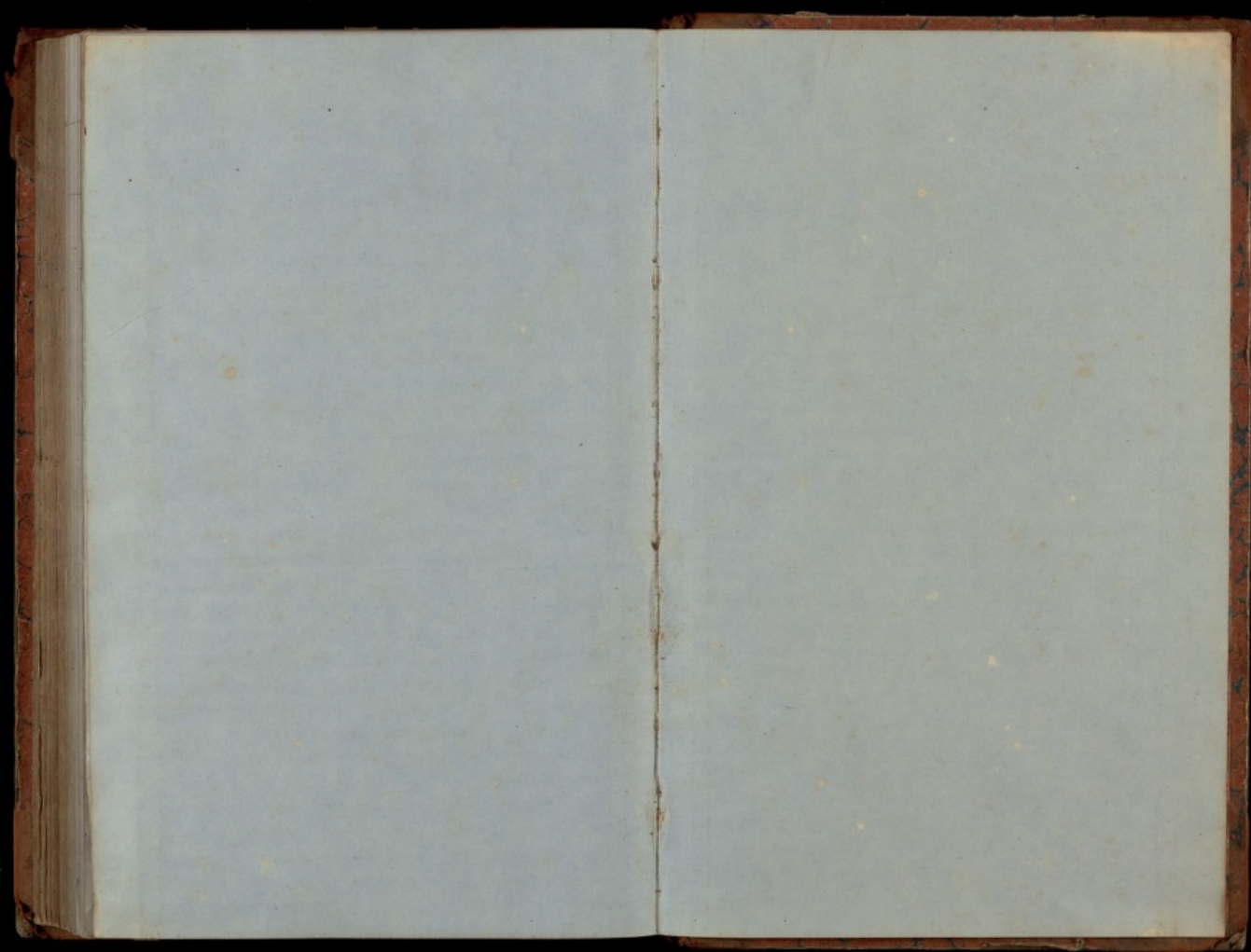
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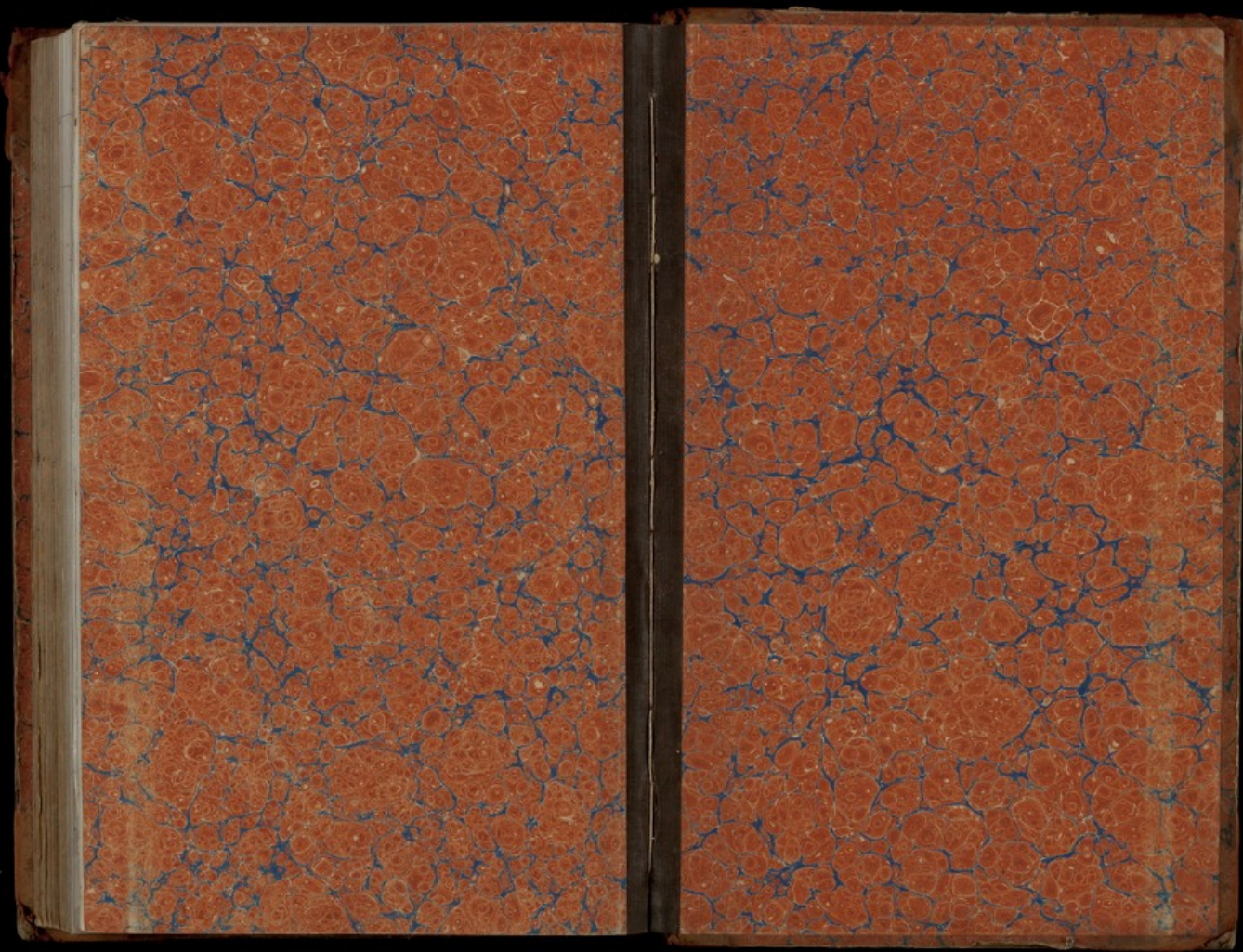


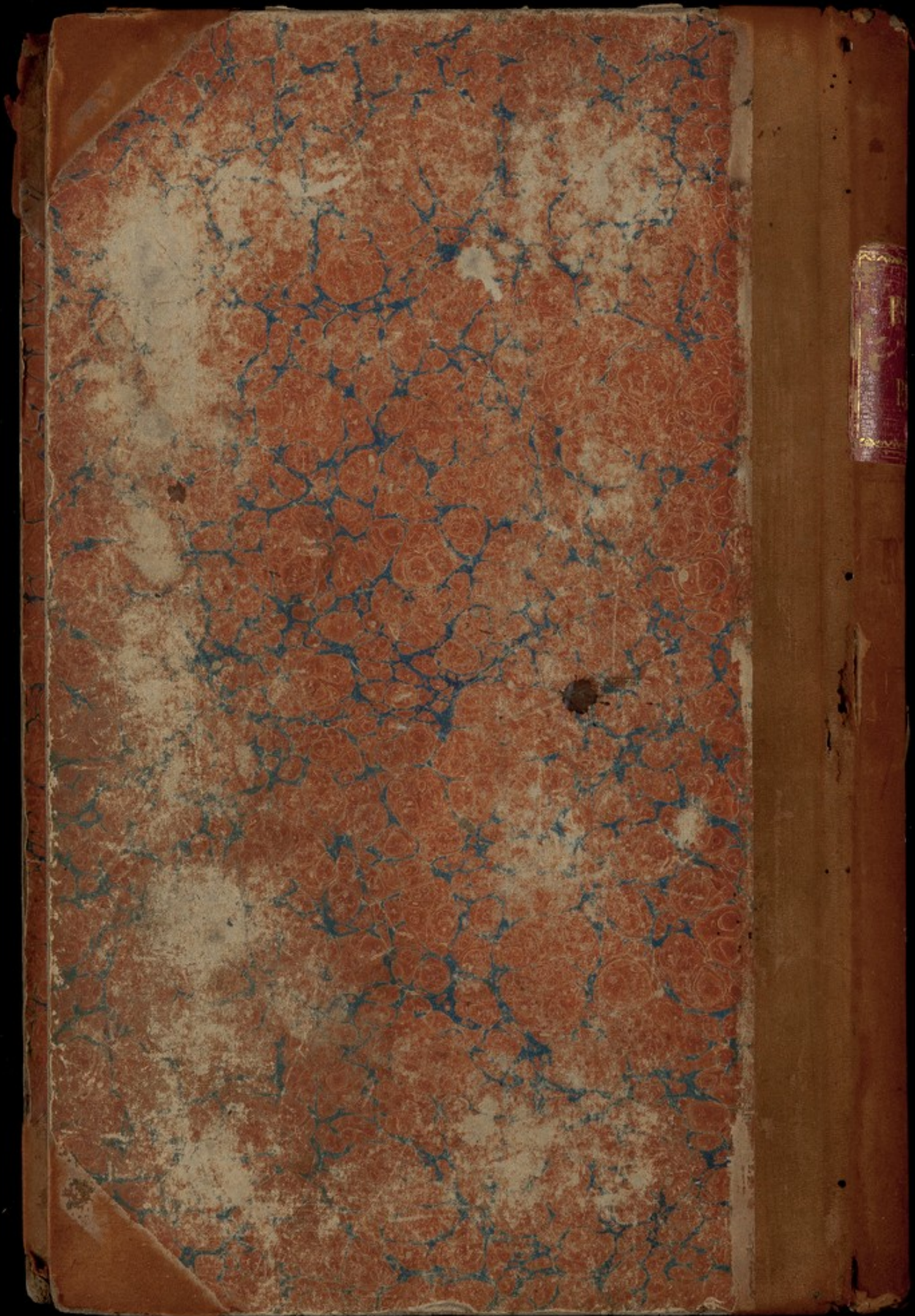
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