Volume of reports and photographs re No. 3 General Hospital (renamed No. 12 in July 1900), Orange River Colony

Publication/Creation

May 1900-June 1902

Persistent URL

https://wellcomecollection.org/works/bawywb55

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

ROYAL ARMY MEDICAL CORPS

No 12 GENERAL HOSPITAL

SPRINGFONTEIN

OPENED AS SECTION No 3 GENERAL HOSPITAL MAY 5TH 1900

RENAMED No 12 GENERAL HOSPITAL JULY 1900

CLOSED FOR PATIENTS

SOUTH AFRICAN 1900-1-2 CAMPAIGN

ORANGE RIVER COLONY

Index

	Page
General View of the Hospital	8
Ground Plan	3
Table shewing the admissions and deaths for all Diseases, by months	5
General Remarks and history of hospital	7
View of the hospital after a snowstorm	12
Chief Points of Construction	13
Photograph of Kitchen and Dairy	13
" Steriliser and Disinfector	
" Sisters' Night Pantries	
" Hairdresser's tent	15
" Recreation Room	15
" Church	16
" Interior of Kitchen	18
" Issue of Dinners	18
" Surgery Exterior & Interior	
" Filtered water Tent.	23
Latrines, Urinals, Washhouses & Baths	23
Photograph of washhouses. Exterior & Interior	24
Quartermasters Department	27
Provision Store	27
Return shewing Diets and Extras by month.	29
Photograph of Interior of Provision Store	28
Linen and Clothing Store	33
Photograph of Auxiliary Laundry	34
Return of Clothing issued	35
Photograph of Interior of Clothing Store.	34
Transport	41
Photograph of Native Camp and Horse Kraals	40
Water Supply	43
Photograph of Water Tower	42
" Medical Officers	44
" Med. Offrs Camp & Mess House	44
" Nursing Sisters	44

	Page
Photograph of Warrant and N.C. officers	46
N.C. Officers and Men	48
Return shewing Admissions and Deaths amongst Natives	52
Native Hospital	53
General View of the Surgical Division	54
Table shewing Admissions and Deaths from	55
Surgical Diseases	56
Report on the Surgical Division	57
Another view of the Division	58
Table of Admissions and Deaths from Gunshot wounds	60
Report of the work of the Division	61
Table shewing Admissions and Deaths for Medical Diseases	84
Table of Admissions and Deaths amongst Officers.	85
General View of Medical Division	88
Report on the Medical Division	89
General View of the Enteric Division	110
Table of Admissions and Deaths in the Enteric Division	111
Report on the Enteric Division	113

Visited & inspected No 12 General Hospital on Dec 23rd and 24th & found all very satisfactory & the patients well looked after & attended to. This reflects all the more credit on the P.M.O Col Somerville Large as there are only 68 M.A.M.C. of all ranks exclusive of Officers

Springfontein O.M.C.
Dec 24th 1901

W. B. Allen
Col.
P.M.O.
O.M.C.

Inspected No 12 G.H. this day and found it in a most satisfactory condition.

W. Wilson Insp. Genl
P.M.O. Army

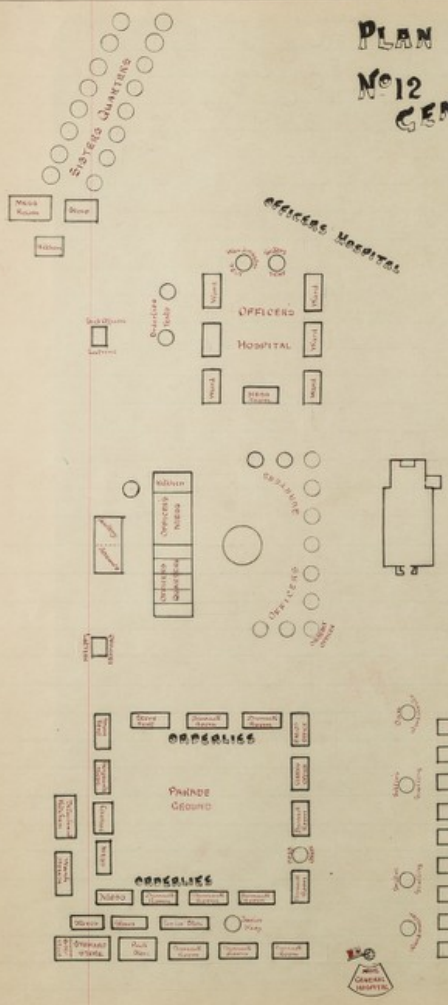
11 April 1902

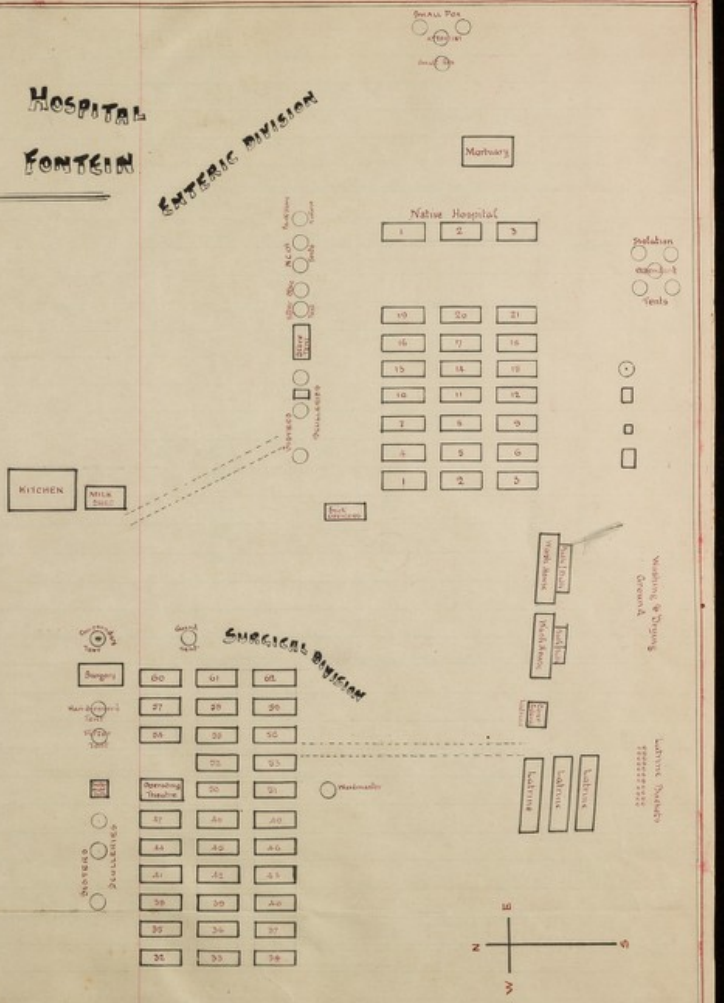
May 23rd 1902
Inspected hospital to-day & found all most satisfactory, reflecting credit on all concerned.

W. B. Allen
Col
P.M.O. O.M.C.

May 23rd 02

PLAN OF No 12 GENERAL HOSPITAL SPRING-FONTEIN





No 12 General Hospital.

Table showing Admissions & Deaths (all diseases) for the years 1900, 1901 & 1902.

Months	Admissions				Deaths				
	1900	1901	1902	Total	1900	1901	1902	Total	Percentage % Deaths
January		454	525	979		17	23	40	4·08
February		301	422	723		5	17	22	3·04.
March		301	240	541		9	5	14	2·59
April		598	194	792		14	1	15	1·90
May	683	453	148	1284	51	17	1	69	5·38
June	661	366		1027	27	2		29	2·82
July	377	324		701	10	8		18	2·56
August	297	349		646	5	6		9	1·39
September	260	332		592	2	2		4	·67
October	328	261		589	7	5		12	2·04
November	265	341		606.	3	29		32	5·28
December	429	446		875	19	24		43	4·91
Total	3300	4526	1529	9355	122.	138	47	307	3·18.

6

This is the handwriting of Col. Somerville-Large

Report on No 12. General Hospital - Springfontein O.R.C.

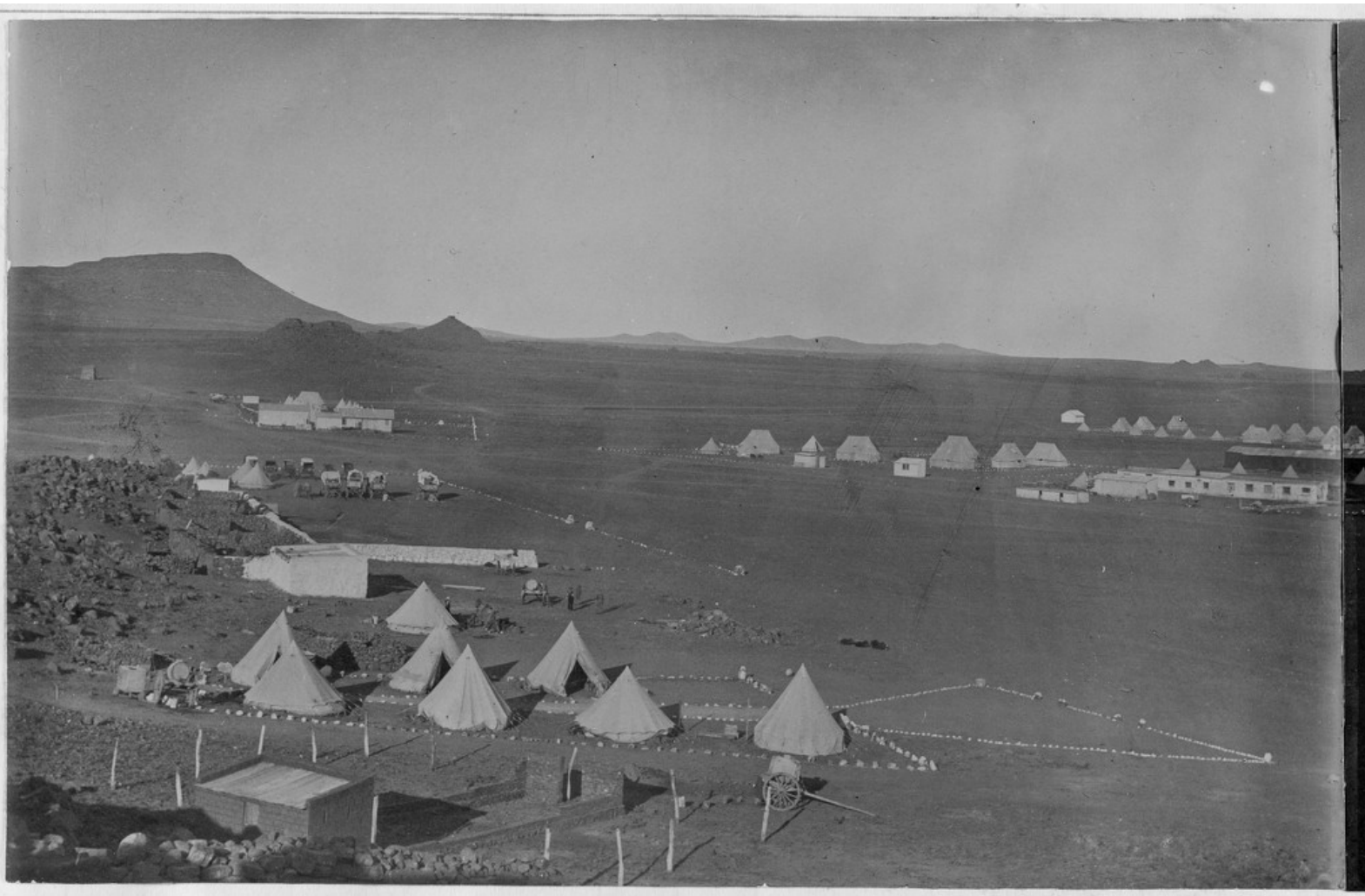
Springfontein is the junction of the Cape and East London line situated on the open veldt, towards the South of Orange River Colony. It consists of a few galvanized iron houses for Railway employees and has nothing worthy of description or note. Several low kopjes surround it about two miles radius from the village. It stands about 5000 feet above sea level. The climate in winter is sometimes severe owing to heavy frosts, cold winds, and snow storms. From December to March severe gales and dust storms are very prevalent the former being very destructive to hospital marquees and tents, the latter occurring during the Enteric Fever season cause much discomfort and are deleterious to the sufferers from this and other diseases. The sudden changes of temperature are also trying, frequently an alteration from 12 to 15 degrees has been registered between midday and night.

The Hospital is on a rising plateau situated about three quarters of a mile to the East of the railway station, the distance was very inconvenient for the transport of sick and necessitated the keeping of a large Hospital transport.

The early history of this hospital dates from 5 May 1900, when a section of

No 3 General Hospital was sent from Cape Town and established as such, under the charge of Lt Col Keogh & then stationed subsequently it has been under the distinguished Command of Colonel A. G. Duke from 11th August to 15th November 1900 and Colonel G. B. Allen from 16th November 1900 to 10th November 1901, during the few days interregnum between the last named officers departure and the arrival of Lt Colonel H. W. Murray admin-istered, Received order from P. M. O. Army on Tuesday 19th November 1901 to proceed to Standerton and take over Pieds duties & to 12 General Hospital which I did on Sunday 24th idem At the time of my arrival it was equipped with 300 beds. Shortly afterwards I received an order from the Pmd. Offr. to have them increased to the regulation number 520, which has further in-creased to 580 sheet & light Pneumo by patients arriving from up Country principally transfers from other Hospitals During the earlier months of this Year when Enteric Fever and Dysentery were prevalent, it has not returned to its regulation figure the reason for these diseases having passed.

The Hospital is divided into four divi-sions, Medical, Surgical, Enteric & Specials and Isolation which will be dealt with under their several heads, the two former lie alongside one another, separated by a space of about fifty Yards, in which are situated the Surgery Night Wardmasters tent, Visiters Pantries



Night & day, filtered water tents and hair dressers establishment. Behind these two divisions lie the Cook houses. In the front and at the side of each division were wide promenades amply supplied with garden seats for the accommodation of convalescent patients from where they could view the frequent games of football cricket &c. played.

- Please see ground plan -

The British pattern Marquees were the only sort used in this hospital and were satisfactory, they were arranged in rows with 6 feet paths between each and were equipped with one table and form, 6 spring bedsteads, 1 Windsor chair and all other ward equipment laid down by regulation. Some marquees had wooden floors, and some tarpaulin coverings which were far preferable to the former as they allowed more internal space, rank grass did not grow under them, nor vermin exist, beside being more easily kept clean - The marquees were all lighted by oil lamps, which are dangerous and give insufficient light and are unsatisfactory in being easily and constantly broken. Electric light is far preferable. Each General Hospital should be fitted with an Electric plant and lighted by electricity.

The Nursing Sisters pantries were situated alongside the divisions they worked in.

Separate tents were set apart


HAIRDRESSER
9 TO 1
2 TO 3-WARDS

in the Medical division for Tubercular Disease and Insane.

The Chief Points of Construction and interest are

A Dairy Dept 15 feet by 10 ft, to keep Milk Cool and fresh and free from Contamination after Sterilization, Reinundred weight of ice does Keep it Constantly during the hot weather, it was built of brick both Galvanized iron roof and was fitted both Shelves and large tin and enamel vessels both Covers.

Photo -

A Cookhouse attached to above Dept for Milk Sterilization, Frequently 900 pints of fresh Milk had to be thus treated daily, It was the same Dept and Same Construction as the Dairy and fitted both three Sterilizers

Photo -

Sterilizer for Enteric excreta and Urine, Consisted of two large Range pots set in brick fireplace, this was absolutely necessary and was erected in December 1901.

Nursing Sisters Night Pantries one in the General Hospital in a Central Position and one in the Enteric Division, They were also built of brick both Galvanized iron roofs. They proved of much Comfort to the Sisters on night duty during the severe winter nights and were fitted both two double Oil Stoves and other necessities for Comfort & ease


PEACE

Hairdresser | Hairdressers tent where patients could get their hair cut free of charge the hairdresser was liable for calls to bedridden patients on requisition signed by Medical Officers or Senior Wardmasters of division.

Ward Boxes. | Ward boxes for patients food &c made out of medicine packing cases, painted red with number of ward on each, these were beneficial in preventing contamination from dust and flies in these articles

Recreation Room. | Recreation Room, which was first used in April 1902, consisted of a brick house with galvanized iron roof size 100 ft. by 28 ft. At one end was a stage 20 ft deep, the back portion of which was fitted with an altar and accessories for divine service railed off from the rest of the stage. Services for all denominations were held in this hall, also frequent concerts, teas and other entertainments. The other end of the hall was fitted up as a library, reading and writing room, a plentiful supply of books, magazines and papers sent by kind friends in England, a good piano; also writing table with ample supply of writing materials, were provided these comforts were much appreciated by the patients and hospital personnel, previous to this hall being built, four marquees laced together


PEACE


PEACE

formed the Recreation tent, this being very destructive to Canvas led me to build this Hall.

Divine Service

Divine Service was held in the Recreation hall at the following hours on Sundays
Church of England. Celebration 7. a.m.
Roman Catholic Mass . . . 8. "
Matins . . . . . 11. "
Evensong . . . . . 7. p.m.
and also on Wednesdays.
Presbyterian Service was held when a Clergyman of that denomination visited the Hospital
A large harmonium which was found at the distant Field Hospital was played by Nursing Sister White R.R.C. the Choir Consisted of Nursing Sisters, Officers N.C.O's & men and there were usually 15 in number these made our Service bright and cheerful, The Chaplain also held Classes of instruction for patients and personnel when they wished to attend.
The Morning and Evening Services were by the wish of the Commandant and the Chaplain, also the Garrison Service on Sundays. Many Civilians from the Village and Refugee Camps attended our Services

Kitchen

The main Kitchen was situated at a point directly behind the Medical and Surgical Divisions, and equidistant between them and the Enteric Division. It was about 40 ft long by 15 ft wide both a large Scullery attached which was fitted with a long Zinc trough-Stand with a plentiful supply of boiler, hot & Cold, a draining pipe


PEACE

From the Scullery and Kitchen led to a cesspit behind the latrine at the South Side of the Hospital which was emptied morning and evening into Sanitary iron tank.

The kitchen was fitted with two double ranges with two large hot water boilers attached and storage cistern overhead. Two large 'Cattle boilers' were fixtures, principally used for making Soup, of which an ample supply was always ready for incoming Convoys. Four more boilers were situated outside the kitchen, used for boiling potatoes and other vegetables. A hot plate to hold 400 diets was constructed in May 1902.

The dietary used is that commonly in use in General Hospitals and which is satisfactory. The men prefer to have their meals in their wards, though a dining room was ready for their use if they wished to use it.

The Cook's establishment consisted of a Serg. Cook one Corporal six men and two natives this was found to be ample.

The Milk Kitchen situated alongside was only used for sterilizing milk as already stated some 900 pints of milk were sterilized daily during the enteric fever season.

Opposite are photographs of the kitchen as well as one showing the dinners being served.


LAZENBY'S
SOUP SQUARES

Queen Dining Room

Hyde Marquee separated formed the dining rooms for the Corporals and Private Ranks, and Regimental Orderlies in all 12 messes, the Corps Sergt at each table & preserved order and regularity. Shortly after my arrival I established a Sergeants Mess in an adjacent Marquee, this was a very acceptable change & what previously existed of all Ranks dining together and messing together

Canteen

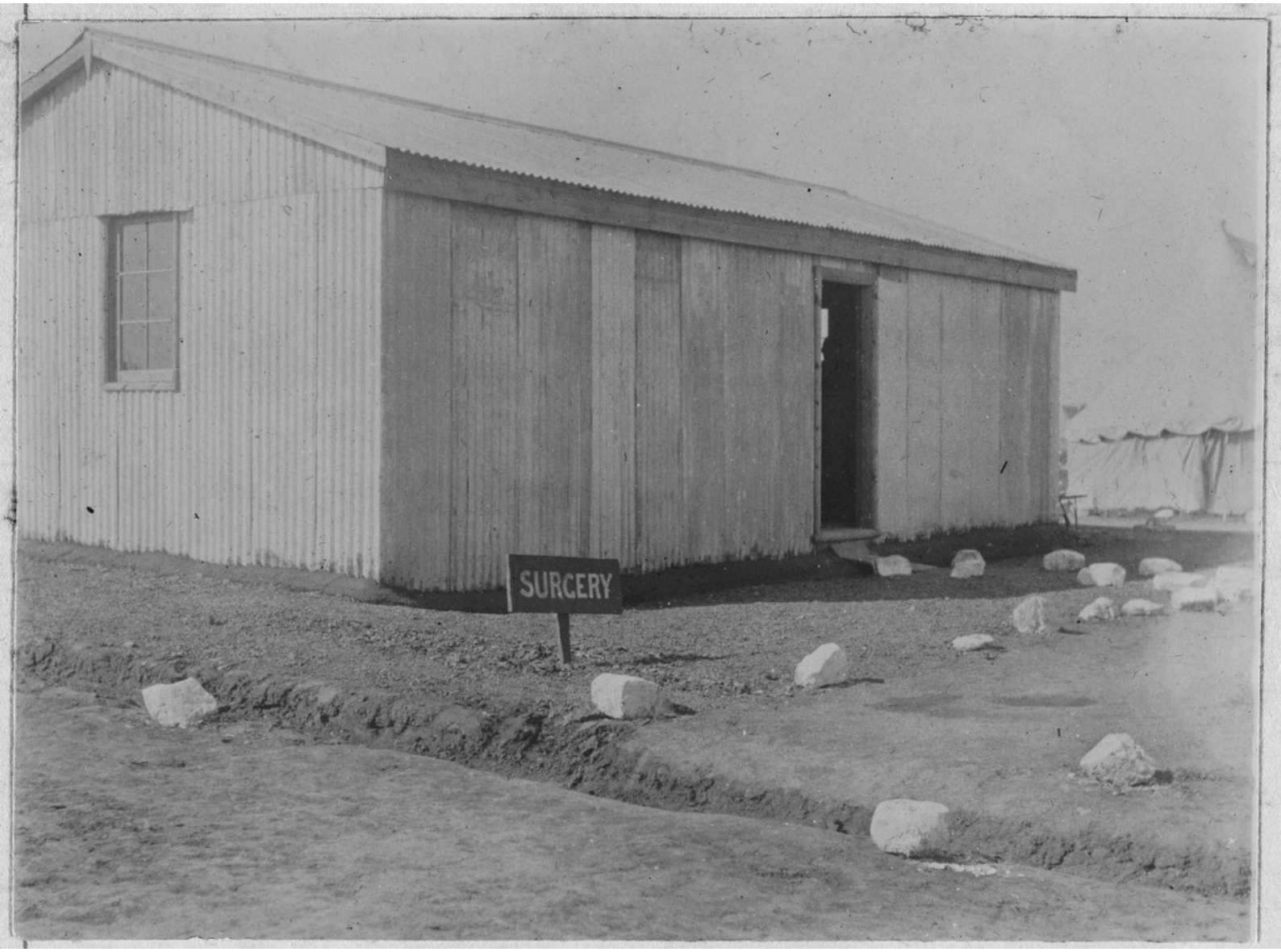
A Canteen was erected in January 1902 built of brick and stone roofing half being a beer store ~~the other half being~~ and dry Canteen, the latter was specially acceptable & the men provisions being sold at the same prices as at the Field Force Canteen each man of the hospital personnel with the kind permission of the General Officer Commanding was permitted to have one pint of beer daily on payment, this liberty was much appreciated by the men and it was never abused the other half of Canteen was used

Red Cross Store.

as a store for Red Cross supplies which were issued once a week under my observation, a warrant officer kept in his room for the safe custody of all goods.

Photographs shows the Canteen & interior of the Surgery which was situated at the East End of the hospital between the Medical and Surgical divisions and convenient to the Enteric Division


SURGICAL


SURCERY

It consisted of a galvanized iron hut constructed in April 1902. It was replete with everything necessary for treatment of sick

Filter Tents. Filter tents were established in December 1901. previous to which filters do not seem to have been much used.
A tent was situated between the Medical and Surgical divisions fitted with two large painted barrels "which obtained from the South African Breweries Ltd" behind which two Berkfeld filters stood in charge of two natives, these were constantly inspected daily, the candles were boiled twice weekly and wiped clean sometimes as often as twice daily to ensure cleanliness
A filter tent was also placed in the Enteric Division on the same principal. By this a good supply of filtered water was obtained for drinking purposes

Latrines The dry earth system is in use for latrines, the buckets being emptied into and removed by iron sanitary carts. Using & leaving disinfectants such as quicklime carbolic powder. and Izal were freely used the buckets thoroughly cleaned daily and tarred over weekly. Boxes with dry earth and chloride of lime for use were placed in every latrine
The latrines three in number for patients use were placed at one side of the camp, two for ordinary patients

and one for Convalescent Enteric only. These seat are divided off in the rear of the former and marked "General patients only" All the night soil from the Convalescent Enteric latrine was disinfected. The floor was of Concrete which sloped towards a drain attached which was a Catchpit which was emptied daily.

Urinals

Bucket placed inside the front door of the latrines formed the Urinals, these were emptied twice daily and well disinfected with Chloride of lime or Izal.

Washhouse and Baths.

The two ~~houses~~ two in Number for patients, are situated about 20 Yards from the latrines. They are wood and iron Structure entirely open in front (which is a mistake) and are fitted with a rudimentary iron washing trough-table in the Centre with 3 Basins in each & Water is laid on into them I have had a standard pipe erected outside each bath house & hose attached at the back one being reserved for General patients and one for the Hospital personnel & Water for bath is supplied by two "Sayers boilers" in charge of a Native a very primitive and unsatisfactory arrangement.

A latrine shed for the reception of Clothes was instituted in January 1902. in which I hand 20 buckets

for all Slops and Contents of Chamber pots and bed pans from the medical all Surgical Divisions, these buckets are treated in exactly the same manner as the latrine ones, only a strong solution of Izal was the disinfectant used. The contents was carted away in Iron Sanitary Carts Morning and evening. Previously the Slops &c were sunk in pits one and a half feet deep situated within 50 yards of the latrines [illegible]

For Sanitary arrangements of the Enteric Division see the report on that Division.

Quarter Masters Department.

By far the most onerous and difficult duties of this hospital on its arrival lay with the Quarter Master Department which were ably carried out by Lieut A Wheeler and his Staff handicapped as he was by very limited accommodation for storage, I will only remark hereon

1 Provision Store and Supply of foodstuffs
2 Linen and Clothing Store.
3. Packstore and armoury.

Stewards Store - The Stewards Store consists of 2/3 of a wooden hut, it measures 25 feet long by 16 feet broad and is too small for requirements in it are only kept eatables and drinkables. Combustible articles being


Colman's
Mustard
Colman's
Mustard
Colman's
Mustard
HOUTEN'S
COCOA

Kept under Canvas Shelters in

Hospital, at

DIET ACCOUNT of PROVISI

(FOR RETENTION IN THE HOSPITAL)

RECEIVED, ISSUED, AND REMAINING, FOR THE MONTH OF

Abstract of Hospital Stoppages.

CORPS In the case of Cavalry, the Squadron; in the case of Infantry, the Company; and in the case of the Royal Artillery, Royal Engineers, the Army Service Corps, Royal Army Medical Corps, and Departmental Corps, the Battery or Company is to be inserted.	DIETS subject to STOPPAGE (In compiling these columns every care should be taken that the stoppages are entered under their proper headings)						FREE DIETS	
	Officers	Warrant, N.-C.O. and Men	Boys	Men and Boys, Medical comforts	Other Cases: Number	Other Cases: Rate of Stoppages	Officers, Men, and Boys	Family of Soldier on Married Roll

1st
2nd
3rd
4th
5th
6th
7th
8th
9th
10th
11th
12th
13th
14th
15th
16th
17th
18th
19th
20th
21st
22nd
23rd
24th
25th
26th
27th
28th
29th
30th
31st

-factory rendering the keeping of the
Clothes, clean and dry difficult

33

Kept under Canvas Shelters in

29

Army Form F. 735.

Hospital, at

DIET ACCOUNT of PROVISIONS,

(FOR RETENTION IN THE HOSPITAL)

RECEIVED, ISSUED, AND REMAINING, FOR THE MONTH OF 190 .

Abstract of Hospital Stoppages.

CORPS In the case of Cavalry, the Squadron; in the case of Infantry, the Company; and in the case of the Royal Artillery, Royal Engineers, the Army Service Corps, Royal Army Medical Corps, and Departmental Corps, the Battery or Company is to be inserted.	DIETS subject to STOPPAGE (In compiling these columns every care should be taken that the stoppages are entered under their proper headings)						FREE DIETS			TOTAL
	Officers	Warrant, N.-C.O. and Men	Boys	Men and Boys, Medical comforts	Other Cases		Officers, Men, and Boys	Family of Soldier on Married Roll	Nurses in Hospital for Women and Children	
					Number	Rate of Stoppages				

- Factory rendering the keeping of the Clothes Clean and dry difficult

DAILY ABSTRACT OF DIETS AND EXTRAS ORDERED

Day of Month	DIETS: Varied, Full	Varied, Children's	Roast: ~~Joint~~ FIXED RATIONS	Roast: Children's JOINT	Chop, Full	Chop, Children's	Steak, Full	Steak, Children's	Convalescent, Full	Convalescent, Children's	Chicken, Full	Chicken, Children's	Beef Tea, Full	Beef Tea, Children's	Milk, Full	Milk, Children's	Plain Milk, Full	Plain Milk, Children's	Total Diets	EXTRAS: Drinks: Barley, Rice Water & Oatmeal and Tea	Drinks: TEA PTS (~~[illegible]~~)	† Beef Tea	Puddings: Rice	Puddings: Custard	Puddings: ARROWROOT (~~[illegible]~~)	† Oatmeal and Arrowroot	† ~~[illegible]~~ RICE OZS	† Essence of Beef	† Extractum Carnis	Customary Fruits in season: ORANGES	Customary Fruits in season: APPLES	~~Egg Flip~~ COFFEE lbs	BOVRIL ozs	[illegible] ozs	FLOUR lbs
	No.		No.		No.		No.		No.		No.		No.		No.		No.		No.	pts.	pts.	pts.	No.	No.	No.	No. at doz. oz	No. at [illegible] oz	oz.	in Pots						
MAY 1900. 1st			2273												1739		3393		7405	35	36		7	8	1997			24					23	[illegible]	
JUNE 2nd									2717		1252		98		1801		5417		11285	5	272			41	591	90	8		160	787			45	[illegible]	8
JULY 3rd									3346		1488		96		1040		2759		8729	177	392			383	5607	10							58		
AUGUST 4th									7189		2174		62		945		1202		11572	370	393			189	5210	747			62				[illegible]	[illegible]	
SEPT 5th	103								7590		1091		117		1207		814		10922	200	457			1518	2219	1411							[illegible]	[illegible]	
OCT 6th	6				4		4		3644		579		32		1047		981		6329	155	449			1344	2763	613							[illegible]	[illegible]	
NOV 7th	3								3467		555		36		713		1657		6431	210	406		84	1656	1750	776							[illegible]	[illegible]	
DEC. 8th									1474		588		6		706		2556		5330	1150	534	557	43	1344	1256	444							[illegible]	[illegible]	
JANUARY 1901 9th									1441		1826		12		919		2980		7178	100	648	2383	81	2293	1448	442							47	[illegible]	
FEB 10th									1002		1966		18		981		3814		7781		571	2198	365	2731	2295	914						2	[illegible]	[illegible]	
MARCH 11th	3								1850		2174		5		921		2577		7530		536	2935	553	3296	3160	2013						12	[illegible]	[illegible]	
APRIL 12th							20		3043		2202		2		1121		3241		9629		1047	2712	1562	2466	2434	3852						7	[illegible]	[illegible]	
MAY 13th	10						29		3160		1966		15		1071		3285		9536	140	816	2022	1716	3203	2511	3977						16	[illegible]	[illegible]	
JUNE 14th	3						148		3863		1757				857		2570		9198	3422	813	1286	2229	2461	2344	4438						10	82	[illegible]	
JULY 15th							1403		4994		1718		7		855		1317		9294	500	920	858	1936	3449	2864	4760						17	[illegible]	[illegible]	
AUGUST 16th							587		5855		911		6		593		772		8724	75	825	643	1701	2842	962	872						10	[illegible]	[illegible]	
SEPT 17th							561		4669		1724		1		664		840		8459	100	881	924	1026	3052	1237	5404		164				7	[illegible]	[illegible]	
OCT 18th							1139		3533		900		2		511		667		6752	35	520	602	1147	2454	1096	4352		996				6	[illegible]	[illegible]	
NOV 19th							1527		2866		468		16		692		1082		6651		419	393	1355	1817	781	3533		1132				4	[illegible]	[illegible]	
DEC 20th	35			3	2		996		3686		2505		19		1325		2873		11444	92½	585	1560	2240	2706	1908	3932		816				½	[illegible]	[illegible]	
JANUARY 1902 21st	52						1587		2894		2527		183		1320		2951		11814	7½	1225	1998	3982	4668	2741	4556		632			1035		81	[illegible]	
FEB 22nd	208				19		1845		3198		2680		62		949		2937		11898		34	43	83	97	89	145		[illegible]		443	900		10	[illegible]	
MARCH 23rd	400				1145		2465		3200		2924		11		1010		1940		12095	105	605	1843	3046	2993	2742	4796		106				½	[illegible]	[illegible]	
APRIL 24th	331				218		2193		2360		1913		1		591		1375		9002	9½	183	1048	2259	3699	998	4598		134				½	105	[illegible]	
MAY 25th	23				297		1369		1741		1487		1		317		522		5787		176	996	1165	3234	428	3343		6		217	289		25		
26th																																			
27th																																			
28th																																			
29th																																			
30th																																			
31st																																			
Total in figures	879		2273	3	685		14873		82862		34175		808		23895		54522		220775	6776½	16553	26485	25183	54174	51641	60011	8	4810	222	1481	2234	92½	[illegible]	[illegible]	8

Kept under Canvas Shelters in

ON ARMY FORMS I. 1202 AND I. 1205 DURING THE MONTH.

Milk (pts.)	Fish	Corn Flour	Sago Tins (oz.)	Bread (lbs.)	Butter (oz.)	Sugar (oz.)	Calf's foot jelly (oz.)	Eggs (No.)	Port (oz.)	Sparklet Bottles (oz.)	Sherry (oz.)	Lemon Rum (oz.)	Claret (oz.)	Draught: Sago Porridge (pints)	Draught: Ale Arrowroot (pints)	Porter 8 to Gall. No. (bots.)	Ale 8 to Gall. No. (bots.)	Soda Water (bots.)	Lemonade (bots.)	Brandy (oz.)	Whisky (oz.)	Tins Apples (oz.)	Port Tins (oz.)	Chicken Tins (oz.)	Cocoa Tins (oz. bots.)	Lime Juice (oz.)	Minced Chicken (oz.)	Champagne Bots (oz.)	Biscuits Tins
9811		5		728	265	380	347	2835	2082				48							14702	1028	2	594	132	34	956			3
2256	800			2098	474	845	931	6425	4493				57							11286	493	90	252	2116	125	236	21	7/6	13
18268	8/10			26/8	521	1174	274	8488	5457				68	5		97				5261½	297	24	694	632	219	934		110	15
14895				642	14/22	617	784	9027	5161				25		206	1121	216			2325	482		1390	68	421	600		126	16
14089			60	328	1156	449	644	9764	4068				20		490	1455				1403	224		885		108½	1341		47	13
11726			50	2332	344	2875	263	4983	5190				586⅔			2257				1946	212		616		79½	1801		121	23
10038			1	1028	12/24	3520	287	3843	2812				2720			2247				2682½	237				75	2882		811	23
9471			13	995	24/4	2873	72	3890	1873				1723½			1397		855	232	3960	156		639	145	77½	1699		143	37
9705			2	968	22/8	2987	175	1044/7	5147				1723½			978	310	7930	4408	5385	143		765	730	58	1191		143	48
12411			42	1102	24/12	2582	767	13148	4556				1226½			1462	693	6788	1959	5900	317		697	690	147	824		180	109
15046			90	1282	2011	4747	991	8950	5026				2505			4235	994	6984	2682	6928	713		1016	139	196	573		159	42
16113		162	238	2727	5/16	7207	1660	10089	3395			24	2864			4302	2010	987	297	7746	678		1043	707	178	32		121	3
16419			36	2934	155	8325	1090	14313	5371			420	2453			4915	2450	981	160	8683	1225		1094	905	130	86		254	20
14407			416	325	727	5866	1279	15499	3447			16	786			685	200	2633	863	60473	1991			1011	214	186		522	61
14190			507	1453	1425	2006	1090	1747	2254				4580			4853	2448	2001	1008	6011	2400		1153	553	176	105		362	34
11898			583	2026	56/64	8766	648	16590	1043			20	1720½			3816	772	1639	856	4791	1249		960	104	108			282	15
8449			417	2868	58/85	6769	975	15276	1628				2036			4918	367	379	301	4896	4980		1158	136	138			551	9
6507			186	1805	34/65	6324	739	11046	1817			72	1493⅓			3767	536	3389	574	4357	1978		907	86	137	322		337	
6257			151	1463	3/20	5213	690	9846	2290				2560			3900	1060	4861	857	5020	2353		533	48	166	1044		284	17
12270			302	1976	14/26	5377	325	10947	3699				3010			4616	1033	2604	262	7822	781		277	97	114	2807		261	76
16351		3	344	3008	14/32	8762	80½	16290	7944				11/444			5224	1258	7851	678	8140	885	1331	476	127	101	5219		293	33
18197		1	289	3723	7/24	11250	129½	17434	7843		46/3		15897			4718	902	7176	1533	11368	1751	133	1487	103	105	4477		510	31
19735		1	74	2269	38/47	10052	153½	16803	7175	2			4214			5598	1510	7624	987	11032	1275	1754	122	25	195	1661		435	65
14275	31		39	2468	94/25	8914	60½	11253	4495	2			1946			5448	4	4208	503	6717	569	326	204	92	182	604		177	64
7842	15½	2		1868	7/42	6214		8346	4762				4186			4507	462	2928	720	2713	232	150	40	3	140	336		64	6
330543	564½	17½	45 9/12	18632	13385	148356	16657	253874	136918	11	46 7/3	79/60	62332	5	695	76416	17215	75348	18910	22189	25649	3810	17963	8655	3013½	24956	21	5516	756

I. 1202 AND I. 12

Valentine Meat (oz.)	Sparklet	Apricots	Bananas	Hams	Grapes	Lemons	Van Houtens
	144						
28							
	1551						
	12/32	46 5/6	25				
	1809		35	4½	56	3/4	
	3578		30	31½	34	30	17
	994						
	1008						
28	1154 7/8	4 6/10	5½ 90	36	56	34 14 7/8	17

BOVRIL · TEA · FLOUR

6

[illegible] Ramé

-factory rendering the keeping of the Clothes, clean and dry difficult

DAILY RECEIPTS		Beef lbs.	Beef lbs.	Beef Steaks lbs.	Beef Steaks oz.	Beef for Beef Tea lbs.	Beef for Beef Tea oz.	Mutton lbs.	Mutton oz.	Mutton Chops lbs.	Mutton Chops oz.	Fowls No.	Fish lbs.	Potatoes lbs.	Potatoes oz.	Vegetables lbs.	Vegetables oz	Bread lbs.	Bread oz
Receipts from Contractors and Supply Department	1st																		
	2nd																		
	3rd																		
	4th																		
	5th																		
	6th																		
	7th																		
	8th																		
	9th																		
	10th																		
	11th																		
	12th																		
	13th																		
	14th																		
	15th																		
	16th																		
	17th																		
	18th																		
	19th																		
	20th																		
	21st																		
	22nd																		
	23rd																		
	24th																		
	25th																		
	26th																		
	27th																		
	28th																		
	29th																		
	30th																		
	31st																		
Total of daily receipts sub-divided as below*																			
Add: Remaining from last Account ...																			
TOTAL RECEIPTS																			
TOTAL ISSUES																			
Remain carried to next Account																			

* FROM WHOM RECEIVED

Contractor

Mr.

kept under Canvas Shelters in the open, and non-edible articles in portion of an adjacent hut.
There was never any shortage of supplies except fresh milk worth mentioning during my time as such, the Officer in Charge of Supplies meeting all demands. The Steward slept in the Stewards Store to ensure the safety of supplies.
I attach Army Form F 735 showing the total monthly expenditure since the hospital was established which also shows grand totals for the whole period, from which can be judged the amount of work done in this Department.
Photo attached gives a view of interior of the Provision Store and showing the Steward and his assistant in the act of issuing supplies.

Linen and Clothing Store.

Taking into consideration the great difficulties the Ordnance Department had to contend with in the transport of goods during the early periods of this Campaign from the base, the onerous duties of this section were well carried out.
The supplying of clothing to patients while in hospital also their bed linen was done in this department, which consisted of two marquees, one for Clean Linen "the issue store" and one for Soiled Linen "the collecting store".
Tent storage is at all times unsatisfactory rendering the keeping of the clothes clean and dry difficult

The Laundress to work also at her own

35

laundry.

Clothing issued to Patients discharged from No 12 General Hospital. Springfontein

Month.	Trousers pr.	Jackets	Shirts	Socks woollen pr.	Drawers woollen pr.	Coats Great.	Helmets	Putties pr.	Jerseys	Boots pr.	Braces pr.	Riding Cords pr.	Cloaks Cavalry	Capes Waterproof	Hats Felt.	Belts Flannel	Shoes canvas
May 1900	98	61	186	81	109	—	—	1	43	28	—	—	—	—	—	—	—
June "	260	229	187	137	90	—	22	15	123	23	—	—	—	—	—	9	—
July "	346	319	331	255	438	100	44	38	434	121	5	—	—	—	—	173	—
August -	154	145	167	152	223	39	20	22	155	60	82	—	—	—	—	71	—
September -	162	125	187	175	205	62	113	66	145	124	154	—	—	—	—	16	—
October -	159	124	184	170	211	62	64	76	110	109	102	—	—	—	—	50	—
November -	106	72	116	133	133	35	45	41	39	89	73	—	—	—	—	20	—
December -	203	149	237	206	182	68	68	29	36	92	56	—	—	—	—	40	—
January 1901	43	20	60	51	76	13	15	7	7	24	60	—	—	—	—	11	—
February -	54	23	91	91	79	7	30	15	6	3	102	—	—	—	—	2	—
March -	58	32	113	120	158	48	37	47	39	34	130	—	—	—	—	24	—
April .	158	112	149	235	297	67	53	80	137	40	182	6	—	4	—	27	—
May -	101	68	115	145	183	60	16	30	123	32	89	33	—	4	—	33	—
June -	98	84	165	155	230	79	33	96	159	53	104	4	—	2	—	9	—
July "	157	165	255	222	287	69	55	101	173	112	134	31	—	—	—	28	2
August -	130	139	157	200	217	62	65	133	128	77	120	26	—	4	10	21	—
September -	201	168	254	245	250	61	40	135	111	84	167	1	—	6	37	5	—
October "	80	99	156	165	158	26	31	112	59	47	113	69	—	2	33	18	—
November -	51	57	82	72	74	27	13	47	34	34	61	20	—	3	41	8	1
December -	161	105	195	178	166	52	53	126	48	91	134	30	—	15	85	9	—
January 1902	206	150	279	268	318	80	54	140	156	140	140	38	—	5	139	144	4
February "	179	151	307	304	376	78	42	120	213	121	171	14	5	—	123	172	4
March "	152	135	262	262	283	79	16	101	204	120	169	30	15	—	175	223	6
April "	135	95	197	178	197	57	4	70	185	84	86	27	14	—	137	45	8
May "	98	82	140	136	146	33	17	77	145	67	105	25	18	—	77	42	9
Total.	3550	2909	4572	4336	5086	1264	950	1725	3022	1809	2539	364	52	45	857	1200	34

A. Wheeler. Lieut + Qr mr.
RAMC

Clothi

Month.	
May.	1900
June.	"
July.	"
August.	"
September.	"
October.	"
November.	"
December.	"
January.	190
Febrwary.	"
March.	"
April.	"
May.	"
June.	"
July.	"
August.	"
September.	"
October.	"
November.	"
December.	"
January.	190
February.	"
March.	"
April.	"
May.	"
Total.	

The Laundry work also fell on this section the Soiled Clothes having to be sent to Naauwpoort. Now a Cause of much difficulty and the delay in their return which hardly always took place Gave rise to much inconvenience (in Shortage of Clean Linen and Clothing) & much so that the hospital had to be duly equipped in this respect & be prepared for emergencies, beside which I established a rough Laundry alongside the hospital & work at whole which every hand in demand (Emphatic) By this I saved the Government also Considerable expense, over 600 Articles being washed weekly.
The Clothing of patients discharged from hospital was also carried out in this Department. Since May 1900 all patients were supplied free of Charge with a complete outfit & portion of same as the state of their Clothes required, this included uniform and Underclothing, the amount of work and responsibility in this extra duty entailed Can be judged from the appended return which gives the total issue by month also grand total for the Campaign I am of opinion that a Laundry should be attached to every General Hospital under proper Management, All the washing both at Naauwpoort and here was done with Cold water and was consequently not very satisfactory. All linen used in the treatment of Contagious and Infectious Cases was disinfected in Meyer's Apparatus before being sent to the Laundry.

Pack Store and Armoury.

The Store Consisted of two tents of a hut. 25 ft by 16 ft with shelves all round and Centre double rack for Storage of Kits. It was also too small for the requirements. The work in this section which necessitated the Counting Registration Disinfection Care & Cleaning of Sometimes 500 & 600 patients Kits & Clothing which were always very dirty and frequently infected with vermin besides the Cleaning and oiling of a similar number of Rifles and Bandarms, was too small duty. This latter was performed by two Regimental Orderlies Selected Convalescent patients. The Kits of Each man admitted with Enteric Fever and other Contagious & Infectious diseases were disinfected in Wreschs apparatus before being put into Store.

Transport.

Sept Photo five views of transport lines and Kraals.

Owing to the Occasional Extreme Severity of the weather during the winter months and the horses being without Shelter Shed Type Kraals erected in March 1902. Ten for transport horses and one for Medical Officer and Nursing Sisters horse and one for Cattle. The walls 6 feet high were built of stone their inside measurements being 60 feet by 25 ft. Chaumes roofs were also constructed alongside. 20 horses were sufficient for the transport work during any term of office and six Ambulance and two Cape Carts were also used for transport of sick

Water Supply

In 1900 and early months of 1901. the water had to be carted about one mile from a spring supply situated near the Lemonnt Camp at the west side of the Railway line. this was most inconvenient and a great labor. Colonel O. B. Allin on account of the great inconvenience and difficulties related thereto sank a shaft about 150 yards to the east of the Hospital and struck a plentiful supply of pure water this source was continued until April 1902 when the Royal Engineers after investigation sank a tube about 50 yards from above well (with a diamond drill) and found water over which were laid four large water tanks elevated by stone masonry to allow of all for hospital supply through pipes which were then also laid out to the different these tanks were filled by a steam engine pump. A sufficient supply for the city obtained. Credit to Col Allin & due the credit of having first discovered the water which previously was believed not to have existed the tanks were roofed in to preserve the purity of the supply.

Medical Officers.

Photo shows a group of Medical Officers serving in the hospital May 1902.
Lt Col Reade, Lt Col Reed, Surg Maj Donaldson-
Lt Col Webb, Nolan & Wheeler. Civil Surg. Wilbond
& Hiram.

Officers Quarters

Photo to show a view of the Medical Officers Camp and buildings & huts (with quarters) a portion of the mess house also erected by Col Allin in 1901, the eight sleeping rooms, Kitchen & Out Offices were built by Imperial in May 1902.

Nursing Sisters.

Photo shows a group of Sisters doing duty in hospital May 1902
The Nursing Sisters attached to the hospital, numbered at various times about 40. When I took over Charge 16 A.N.S. Sisters were doing duty under a Superintendent Miss D. Brown Army Nursing Service until she left in March 1902 to take the appointment of Matron in Chief of the A.N.S. Service. She performed her duties in a very capable manner. She was succeeded by Acting Superintendent Sister Richards who was young and never had any experience in the duties of a Superintendent being only a few months in the Army

Nursing Service.

A well trained Nursing Sister is capable of attending to Ordinary Medical or Surgical Cases, with the assistance of a trained Orderly, One for every 15 Cases. In cases of Fever Cases they could not attend satisfactorily to more than 2 Cases if they did the cooking cleaning and other Nursing details. In severe Cases themselves which certainly is part of their duty they would be unable to undertake (two-and-a-half years as Pro. of General Hospitals) to perform all Nursing duties in Military Hospitals without the assistance of trained orderlies.

All Nursing Sisters during the Campaign the Base Hospital Staff and patients owe a deep debt of gratitude, they were untiring in their work Constant in their attention, firm tho' gentle with patients in their handling of the sick, and many were the expressions of thanks & Blessings I have heard from sufferers and Convalescent patients for their kind labour on their behalf.

They were certainly a great boon in Military Hospitals as they, I may say, their first Campaign

The photograph represents a group of Warrant and Non Commissioned Officers of the hospital who worked in it during its latter months, taken all round they performed their duties in a satisfactory manner

Next photo shows the hospital Orderlies both R.A.M.C. and Regimental. The former during the last six months were numerically weak, numbering only 76, the Regimental Orderlies attached varied between 30 & 70 in number as the sick rate increased or diminished, All performed their various duties in a satisfactory manner, the training in hospital duties of the Regimental men was a source of much trouble and continuous, as their Commanding Officers were constantly applying for their return to their units, All the Orderlies with few exceptions gave me satisfaction by the performance of their nursing duties, also the occurrence of crime was comparatively rare amongst them

...tuated Ottie
..., Consisted
...rgical, the
...Enteric Fever
... Seasn, they
...each Acargun
...ds and bedding
...t, and Country
...s refused to
... Cold feeling

...ws the number

...ui	Total.
...8.	376.
...1	18.
...32.	477.

...tients and
...uropean Methods
...ical & Surgical
...ic Fever which
...ated with
... taking bety
...ctives affect
... of the fever

No 12 General Hospital

Table showing admissions & deaths of Natives for the years 1900 - 1901 & 1902

Months	Admissions				Deaths			
	1900	1901	1902	Total	1900	1901	1902	Total.
January		32	12	44				
February		16	6	22		1		1
March		8	12	20			1	1
April		10	15	25		2		2
May	3	29	5	37		1		1
June	14	31		45	2			2
July	22	3		25		1		1
August	11	27		38		3		3
September	8	10		18				
October	20	22		42		2		2
November	22	7		29		2		2
December	16	16		32		3		3
Total	116	211	50	377	2	15		18.

Native Hospitals

The native Hospital situated to the East of the Entenic division consisted of three Wards, one for Surgical, one for medical and one for Enteric fever Cases. During the Enteric season they had to be extended to 5., each Ward was equipped with 8 beds and bedding Complete except sheets, and Counterpanes, which the natives refused to use on account of their Cold feeling on the skin.

The following table shows the number treated and death

	Medical	Surgical	Enteric	Total.
Admissions	183	76.	118.	376.
Deaths	5	2	11	18.
Percentage of Deaths.	2·73	2·66	9·32.	4·77.

The made very good patients and readily acquiesced in European Method of Treatment for the Medical & Surgical The mortality in Enteric fever which was frequently Complicated with Malaria was less high, taking into Consideration that Natives bore the severe strain of the fever as well as whites do.

Report to Medical Division.

55

es East & West
Marquees
wide paths
the ordinary
suitable for the
wooden floors
Each bed
bedstead
from blankets
the other
ance with

ing Lid. the
yards separating
the Nursing
Officers and
rating theatre
Centre of the
plan)
part for treatment
diseases, and

the prehension
when medical
ended, no
done in this
pice.
division
from which

all Cases
Gen Hosp

wounds -

56

No 12 General Hospital

Table showing admissions + Deaths for Surgical diseases for the years 1900, 1901, + 1902.

Months	Admissions				Deaths			
	1900	1901	1902	Total	1900	1901	1902	Total
January		82	36	118		4		4
February		91	12	103				
March		101	134	235		3	1	4
April		47	152	199				
may	38	90	30	158		2		2
June	67	56		123	1	1		2
July	130	26		156	1	1		2
August	101	40		101	1	1		2
September	33	52		85		2		2
October	70	48		118				
November	40	41		140		3		3
December.	59	50		90		3		3
Total.	538	724	364	1626.	3	20	1	24.

Report on Surgical division.

General remarks.

The Surgical division faces East & West and is composed of 33 Marquees arranged in rows with wide paths between them, they were of the ordinary British pattern and were suitable for the requirements. Some had wooden floors and some tarpaulins. Each bed was equipped with Iron & spring bedstead and Horsehair beds, with brown blankets and white Counterpanes, all the other equipment was in accordance with regulation.

The division was situated along side the Medical division about 50 Yards separating them in which were placed the Nursing Sisters Scullaries, Medical Officers and Quartermasters Offices, the Operating theatre and X Ray room being in the Centre of the division (please see ground plan) Special Marquees were set apart for treatment of Venereal, Opthalmic diseases, and prisoners of war.

Lt Col Longhead's full & Comprehensive report on the work done when Medical Officer in Charge is appended, no records of previous work done in this division appears in my office.

Also a photograph of the division done after a severe Dust Storm which happened in June 1902

Statistical table attached of all cases treated in division, also of Gun Shot wounds.

Views of Division

Report [illegible] Division [illegible] 61

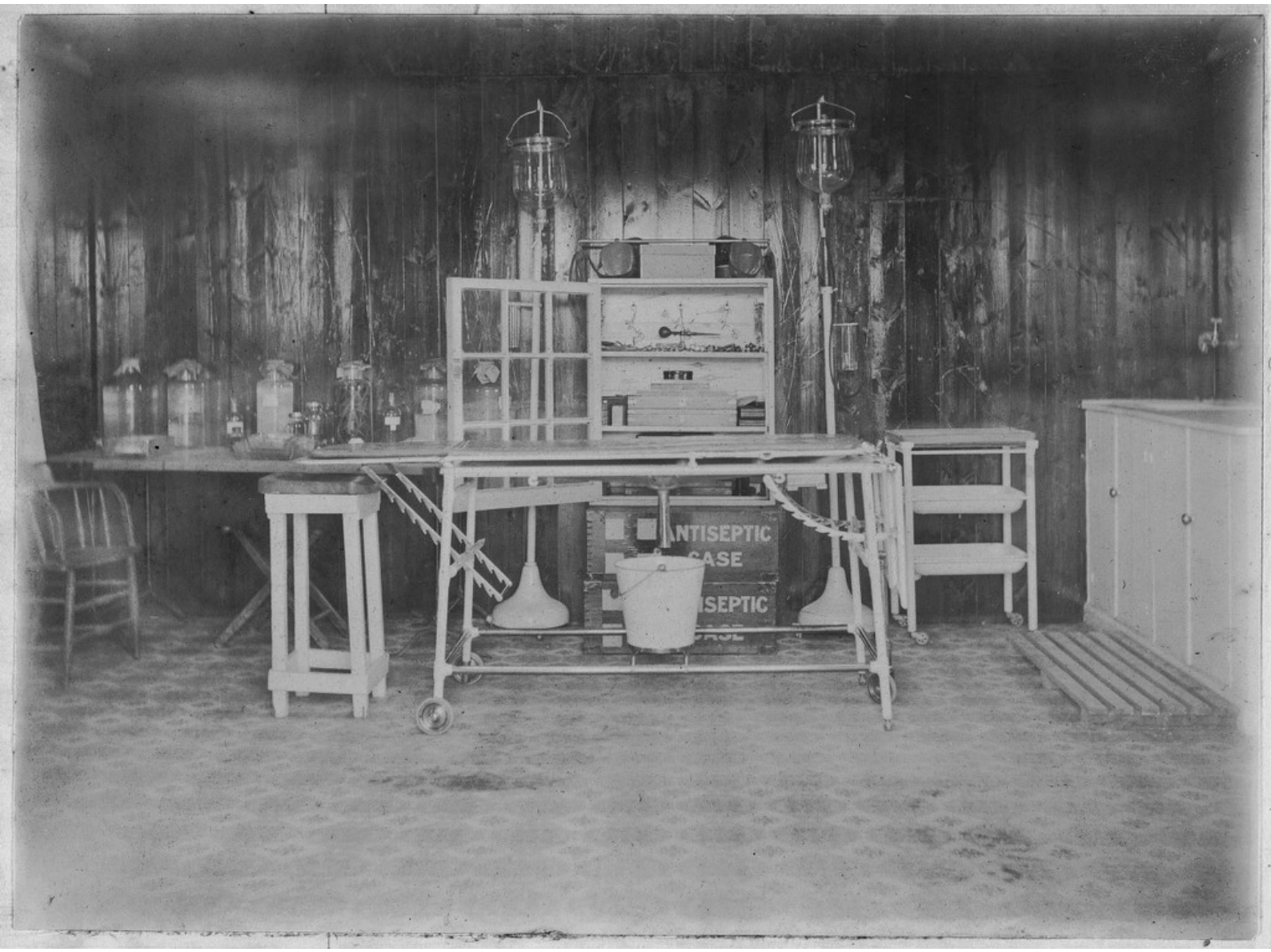
59

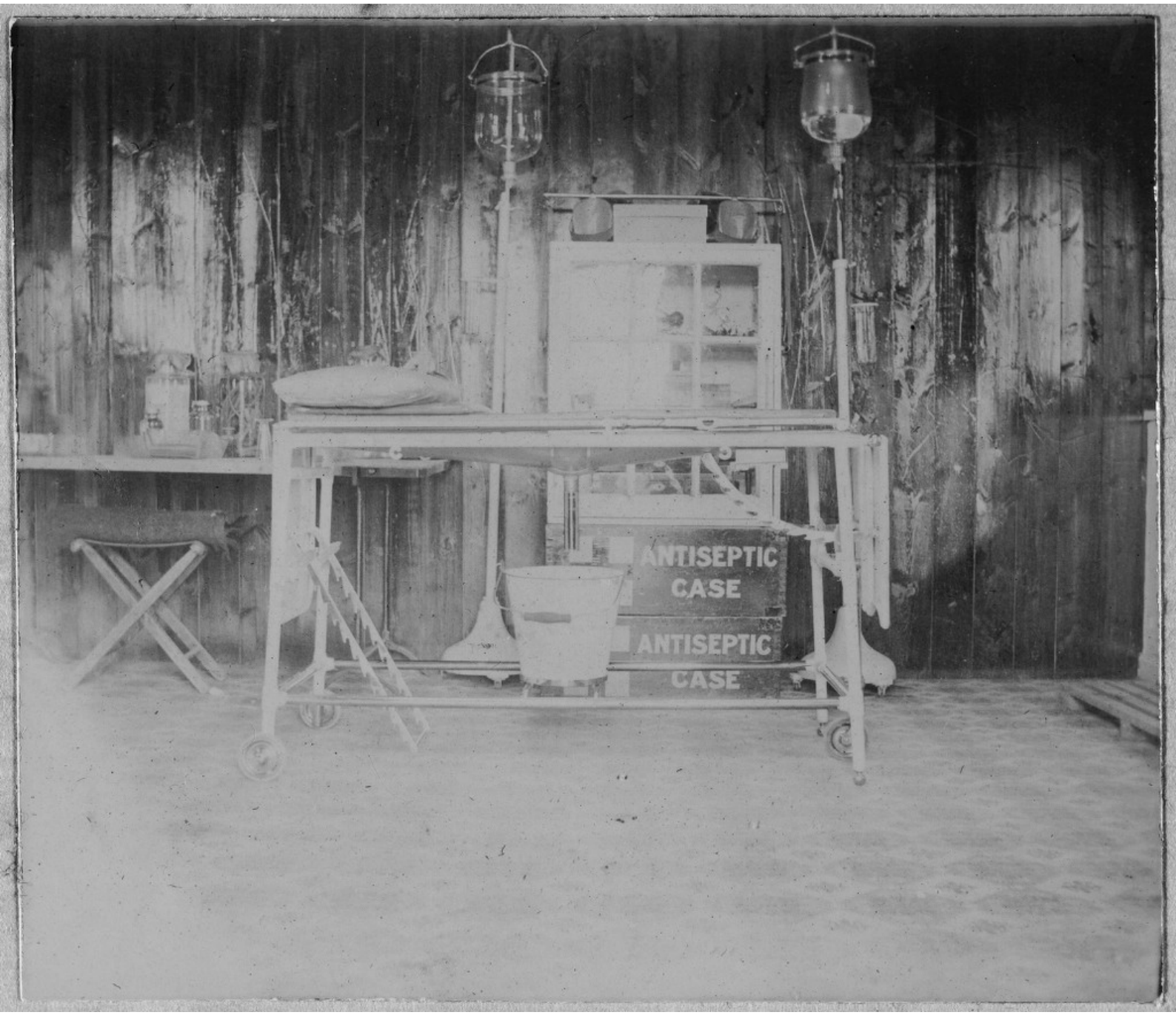
this war
18. Issue of
as to have
tion.
as the only
of the three
the fracturing
is was driven
found in
and

a consi-
being blown
leading radia-
the one case.

usually depress-
tensive frac-
driven into

case that
symptoms of
case where
was haemorrhage
very extensive
sepsy
remaining was
case of [illegible]
being [illegible]
the [illegible]
wounds
the piece
will open the orifice, but if suspicion of


ANTISEPTIC
CASE
ISEPTIC


ANTISEPTIC
CASE
ANTISEPTIC
CASE

60

No 12 General Hospital

Table showing admissions + deaths for Gunshot Wounds for years 1900, 1901 + 1902.

Month	Admissions				Deaths			
	1900	1901	1902	Total	1900	1901	1902	Total
January		7	11	18			1	1
February		23	2	25		1		1
March		12	19	31				
April		7	12	19				
May	21	34	5	60		3		3
June	30	22		52	1			1
July	14	18		32				
August	16	34		50		2		2
September	36	27		63		2		2
October	30	12		42		1		1
November	47	11		58	2	3		5
December	33	12		45		1		1
Total	227	219	49	495	3	13	1	17

Report on (work of the war) Surgical Division by Lt Col. Forshead C.M.G.

Gunshot Injuries Head

The G.S. head injury I met with in this war amounted to not more than 18. Some of them were very extensive as to have damage and brain laceration.
In perforating fractures it was the rule to find the entrance opening in the skull small and with little stellate fracturing around it, small bone debris was driven into the brain tissue it was found in small pieces but quite tangible and capable of being removed
The exit aperture were large a considerable area of the vault being blown out before the bullet and many radiating fractures present in some cases overlapping
In gutter wounds there was usually depressions of the inner table or extensive fracturing of it and spicula driven into the dura mater
Glancing wounds in every case I met with were followed by symptoms of depression and in this case where no fracture existed there was haemorrhage beneath the dura in one very extensive all had Jacksonian Epilepsy
As regards treatment trephining was required in nearly every case of G.S. Wds of skull the entrance opening should certainly be trephined and the bone debris removed. With exit wounds elevation and removal of loose pieces will often suffice, but if suspicion of

depression or the pressure of a clot exists the
outer wound should be trephined and the
parts fully exposed and explored, It is futile
to entertain the idea of absorption in such cases
and if the wounds are septic Cerebral abscess is almost
certain to ensue. I have met cases in which there was
extensive damage to the Rolandic area with paralysis
of the corresponding limbs where after the removal
of the pieces of bone & clot function was almost
completely restored. Cases accompanied with loss
of Cerebrospinal fluid are always grave, often fatal
and I am unaware of any means of checking such flow
Drainage is very important in head injuries after
trephining. I make it a rule to put in a drain in
almost every case which if no longer required could
be withdrawn in 48 hours and interfered little with
the scalp healing. In no case did I return the disc
of bone removed by trephine, because as a rule the
disc was never a complete one and often it was found
necessary to enlarge the opening with the Hoffman
forceps for further exploration. In one case I met
with which had been so treated a sinus remained
and I subsequently had to remove by a second
operation the remains of the disc which had necrosed
If the pericranium is reflected with the scalp in the flap
incision and subsequently when closing the wound
is fairly well brought together new bone always forms
in the opening and there was neither pulsation or
tendency to protrusion after a time, as regards
flaps of scalp they should be large and semilunar
with the broad base downwards.
Many operations I performed with a + shaped
incision the long limb being vertical, in this form
less vessels will be divided and there will be
much less trouble from haemorrhage
G.S. fractures involving the frontal sinuses are
not hopeful and this is explained by the free
communication with the nasal passages and
liability to infection. In dealing with all head

injuries thorough cleansing of scalp and wound should always precede operative interference. Where the dura has been torn and the scalp wound septic cerebral abscess is liable to ensue.
For this condition the thing should be done viz: open up anew and explore with trocar & canula in many directions and to a good depth, if pus is hit it should be drained only, not irrigated out, and if favourable progress ensues the tube should be gradually shortened. In no case have I seen general meningitis following in cases from which bone and clot had been thoroughly removed. In cases of subdural clot, where the dura had not been originally torn, but where it had to be incised in a stellate manner to allow removal of the clot, I always united the edges by fine sutures of silk leaving a small opening in the centre for a drainage tube to abut against, this is important as it prevents bulging subsequently. Where the dura is extensively damaged or torn away we must rely on the coaptation of the pericranium attached to the flap and the speedy union of the scalp incision in addition to a broad pressure pad on the outside of the dressings. The amount of damage to bone in these injuries depends very much on the size and composition of the bullet and its velocity at the time of impact. In the case of Mauser and Lee-Metford bullets with nickel case at short ranges the projectile usually did little damage more than tunnelling, extreme fissuring being rare. But in the case of larger leaden bullets viz of sporting revolver, there was always very extensive

pissuring of the entrance and exit wounds both much disintegrated & the main substance Headquarters are very dissatisfactory to deal with and the astonishing results which follow Successful Operations frat[illegible] the Surgeon.

G.S. Chest Injuries

Penetrating Chest wounds were usually perforating ones, the bullet generally entered and left the Cavity by an intercostal space, if the bullet passed through a rib, it was always by a tunnel when the angle of the part was of any thing approaching a right angle. I saw however with a case where an intercostal artery required ligaturing. Slight haemorrhage into the pleural Cavity was the Rule. extensive haemothyrax an exception. Injury and lasting only a short time only one case with air and blood came under notice, the damage to lung tissue was as a rule only slight pin prick punctures present for a few days a week and then disappearing, no abscess of lung followed any wound

The blood effused into pleural Cavity was absorbed in most cases undergoing putrefaction, when it was very extensive it had to be aspirated empyema ensued in only about 3 cases which and in these resection of rib and drainage was carried out. they all recovered.

No case of injured pericardium was observed such cases presumably dying before admission into hospital

In one case of Chest Wound both by injury of the spine the passage of the bullet was in a vertical direction, fracturing several of the ribs posteriorly and driving piece of bone into the lungs & wounds of Chest unaffected by the bullets were observed. The track of bullet in Chest wound seldom suppurated. In two cases of Pulmonic Haemothorax where aspiration had to be performed prolapsus

due to pressure during the early stages
large blood clots below over the diaphragm
and liquid blood and serum above.
Reaccumulation of fluid after operation
was unusual. In cases where the peritoneal
cavity was resected for blood clot or emphysema,
it is best a decisable to wash out the cavity
drainage is quite sufficient. In one case
where irrigation was carried out, very
alarming symptoms came on although
there was no obstruction to the outflow of
the irrigating fluid

P.S. Abdominal injuries.
Most abdominal wounds were perforating
ones. The exit was often as small as the
entrance one. A good many recovered without
any grave symptoms or operative treatment
although from the direction of the wound
there must have been injury of some
part of the gut. In some cases (where symptoms appeared)
wound of the mesenteric vessels was
present. In such cases the wounds were several
days injured when seen and were either
better in a way to recovery both without operation
or where the damage was extensive, in
a condition of advanced peritonitis where
operative treatment was almost hopeless
and if carried out was unsuccessful.
In some of the cases operated on the
wounds of the gut were lacerated and
oval in shape with ragged blood clots.
Extensive extravasation of contents &
general peritonitis present. In one case
there was injury of large mesenteric vessels
and much blood clot present in the
peritoneal cavity. Two cases where the
bullet passed through the liver recovered
without there a stitch was placed in each of the

openings for drainage and the tunnel healed without trouble in both adhesions had not formed at an early date between the peritoneum covering the organ and the parietal peritoneum lining off the tract from the general peritoneal cavity.

Early laparotomy in abdominal injuries has not had a fair chance in this war. As most of the wounded have been far away from a general hospital when injured and with field equipment and dirty water, often scarce the opening of the abdomen and closing of wounds of the bowel is not only undoubtedly but almost surely be followed by septic peritonitis. The man who has been shot through the abdomen on the field is best left alone, at rest and with little food for several days, if he is not in close proximity to a general hospital. Laparotomy performed when general peritonitis is established and extravasation present has not been successful in my hands.

I have seen three G.S. wounds of the abdomen where the kidneys have been injured as evidenced by haematuria they all recovered without interference the case where the spleen was pulped up and had bled freely into the abdominal cavity died. not from injury alone. A very large number of perforating abdominal wounds do recover without any operative interference

G.S. injuries of spine

Where the cord has been rendered functionless at the seat of injury are nearly always fatal in the course of a month or two. I think I only one case in this war where life has been prolonged up to the present date (end of hostilities) in such the cord was damaged to such an extent that the patient was paralysed below the seat of injury, this man was wounded at Colenso in 1899. Where complete paraplegia

had been established, in all these cases they ended fatally. A goodly number of cases where the bullet has passed in close proximity to the cord and where the lesion presumably has been pressure from haemorrhage, have made complete recoveries. Rules examined after death have revealed a condition that might have been remedied by operation, the lesions and lead-jacketed bullets in passing through bones of a cancellous nature nearly always have caused them to fracture, it is very rare indeed to find little displacement of the laminae. Vertebrae have frequently been tunnelled. The cord is disintegrated by the passage of a bullet through it, that it is rendered useless as a conducting medium. In the early stages the interspace is occupied by slight haemorrhage and there is congestion of the vessels around it. Later it is by a 'custard condition' and still later on this is absorbed little remains but the membranes. Here does not appear to be any tendency to repair. The pressure lesion in the shape of bedsores comes early, predisposes the rule in the early stage but soon passes off. The urinary tract becomes affected at an early date. Normally these cases suffer little pain after the initial lesion is brought up. Surgery can do nothing for them.

G. S. Wounds Extremities

Wounds of the lower extremity were far more common than wounds of the upper. The entrance & exit wounds were usually small and circular if the bullet passed through fleshy parts only and impinged at right angles to the surfaces.

In the case of deformed and soft nosed bullets the entrance was larger than that made by the plain bullet, and the exit varied considerably, the rule being to find it very large and irregular. Often the soft nosed bullet separated into many pieces in the fleshy parts and the pieces made separate exit wounds or some of them lodged. Many of the exit wounds made in this manner were of enormous size even where no bone had been damaged. Sometimes soft parts were torn out through the skin in all directions and projecting inches above the surface. When hard the bullets impinge on cancellous bone tissue the rule has been for tunnelling to take place but in some instances complete fracturing occurred with little comminution. Bone debris was nearly always found in tunnelling.

When the same sort of bullet hit compact bone tissue such as the shafts of humerus or femur extensive fracturing & comminution was the rule. On the side of the shaft of bone first struck by the bullet the comminuted fragments were nearly always smaller and less displaced than on the side on which the bullet made exit; where there usually was more than one pointed splinter, representing sometimes half the diameter of the shaft, and up to three

or two or three inches in length. Occasionally the fracture was transverse without any long fragments being found on each side, but with much comminution of both the fractured ends. In only one case did any of the fragments present a lead-stained appearance corresponding to the track of the bullet. In this case it has been observed that bone was blown out through an exit wound and these two were at very short range, the muzzle of the rifle almost resting against the skin. In most cases where the comminution was very extensive the exit wounds were comparatively small, often not more than twice the size of the entrance one.

In one case where death ensued from tetanus and an opportunity was afforded for post-mortem examination a smooth bullet had entered the upper & posterior part of the great trochanter, tunnelling it part downwards into the medullary canal in a diagonal direction and then displaced a long broad fragment of compact tissue from the inner & upper part of the shaft. In a few cases in which one found the bullet subsequently lodged embedded in the muscles of the opposite thigh, it was found to be either completely broken up or the nickel mantle separated from the leaden core & both much distorted. It was im-
possible to distinguish wounds made

by the manner from those made by the Leebert bullet. In a case I saw the bullet ricochetting off the metal wheel of a gun carriage and then passing through the fleshy part of the thigh of an officer standing 6 yards from the wheel and lodging in the trousers, inflicted a series of rather deep burns on the skin, whereby touched and felt quite hot when the officer removed it. The bullet which I saw was oval & slightly flattened towards its point. In case of wounds of the extremities both bone damage & lodgment of the bullet the X Rays were invaluable in ascertaining the amount of damage done & illustrating the effects of treatment. Shell wounds both small entrance and exit openings were aseptic and healed up under Carbolic, those that became infected nearly always required the openings to be enlarged and free drainage established. Large & highly infected wounds often required the constant use of warm boric baths sometimes for days before they cleaned up. Ordinary wounds did well under Lister's 1 in 20 Cyanide gauze dressings, where there was extensive cutaneous destruction Thiersch's method of skin grafting was carried out with excellent results & soon as the parts were fit to take it was the best means of preventing cicatricial contraction especially where the wound is near or over a large joint.

Sinuses through cancellous bone tissue in most cases required scraping both of the edges & soon as the removal of all debris before healing could take place

In dealing with G.S. fractures in compact bone tissue the rule was, if the wounds were aseptic and the patient had no rise of temperature

to clean & dress the wounds - and not interfere with the seat of fracture by operative measures. If the wounds were infected which they generally were, it was most important that all comminuted fragments should be removed as early as possible by operation, and any sharp projecting points cut off either by wire saw or cutting bone forceps. If this course were not adopted at once, suppuration would continue & increase until the pieces were removed.

In very many cases where long points were not removed at first operation it was found that they subsequently necrosed and separated and often became enclosed in the new shell of bone, thus preventing the wounds from healing & leaving discharging sinuses.

It is by no means easy to determine fissures in the fractured ends of long bones at the time of operation with the finger, a probe should be used as a lever to ascertain whether the ends are fissured and if found to be so, the pieces should in every case be removed no matter how large they be. On many occasions one has been tempted in dealing with these injuries to leave large pieces which were not very loose & were covered with periosteum in the hope that they would not necrose and become incorporated with the new callous. Doing this in these cases always proved vain, the pieces invariably had to be removed subsequently by another operation —

I always used an extension apparatus with pulleys & weights for fractured thigh bones. with Sandbags on each side of the limb for some considerable distance above and below the seat of fracture. When there was a tendency to eversion of the foot, a usual occur-rence these Sandbags were made long enough to reach below the foot and they always achieved the object aimed at. One fallacy presented in such cases, viz, where sufficient weight was put on so that measurements gave no shortening any X Ray picture then taken would often show overriding of the fragments; this apparent discrepancy was accounted for by the weights stretching the ligaments of the knee joint, more than the shortening caused by the overriding of the fragments, the X Ray picture including the knee joint proved this by showing a considerable interval between the lowest part of the condyles and the upper articular surface of the tibia. As regards subsequent length of limb after G. S. fractures, where suppuration did not occur and where no bone had been removed by operation very little shortening was present in the majority of cases — sometimes less than 1/2 inch. but I should say that in every case some was present. With an oblique fracture in a muscular subject, absolute adjustment is nearly impossible.

Towards the end of this war we always endeavoured to remove all broken pieces of bone in septic fractures of the femur and clip off with cutting bone forceps the projecting points, or to saw them off with Gigli's wire saw, till sound bone was reached at full thickness of shaft. This course was found in every case to be the most satisfactory, even if a distinct gap were left it always filled up with new bone, and the limb could

be gradually stretched by increasing the weights. In no case did osteomyelitis ensue where this very large drainage tube stayed in too long in the site of fracture and certainly not after new callus has commenced to be thrown out, as they cause tunnels to form in it. When all loose pieces of bone are removed from the site of fracture and the parts well irrigated at the time of operation and daily at the subsequent dressings, suppuration soon ceases.

False joints resulting were rare and I should say in every case I saw the direct result of bad surgery.

If I had to face another war with the experience gained in this one in dealing with G.S. septic fractures of the femur I should make it the rule to resect in all cases that were suitable, that is in all cases where the injury was sufficiently far away from the knee & hip joints to give sufficient space for resection.

In dealing with G.S. fractures of the humerus, extension cannot be carried out nor is it necessary. When the patient can get up, the arm being in long side splints, the weight of the forearm gives the necessary extension when the wrist only is kept in a sling. Besides a slight shortening of the arm is little disadvantage to the ordinary man.

G.S. fractures of the leg and forearms

present little difficulty where only one bone is damaged — the sound one acts as a splint during repair and prevents deformity. I have seen many cases where either bone had been blown away or where it was removed by operation and the gap has always filled up. In one case where about 1½ inches of the lower end of the radius was blown away with some of the carpal bones, a good deal of deformity resulted; the radial side of the hand was drawn up to fill the gap, but the hand was a very useful one. Where both bones were damaged and the wounds septic only the loose separated pieces should be removed at an early date. The parts should be cleaned and the limb rendered immobile by suitable splints; leaving the seat of injury easy of access for dressing. In every case I saw of this nature uncomplicated with vascular damage, union occurred in one or both the bones at an early date. When union had been established, there was no difficulty in removing pieces of bone, retained in the new sheet of callus. Where G.S. wounds of the latter sort were complicated with injury of the main vessels of the part and at the same time septic, the case usually resulted in amputation above the seat of injury. Just three such cases came under my care and in all secondary haemorrhage followed. The injury in each case was in the upper third of the leg. I made an endeavour to secure the vessels, but owing to their deep position could not place a ligature upon them. Even if they could be secured in a septic wound I doubt the value of the procedure — gangrene would in all probability ensue and amputa-tion would finally have to be resorted to

obtaining when the patient's condition would be in no less favourable than soon after the injury.

In one case I saw early in the war the bullet escaped detection at the time of removal of fragments of bone and subsequently became shut up in the callus as shown by X Ray — no endeavour was made to remove it the wound having healed up—

Pieces of bullets imbedded in cancellous tissue were fairly common— suppuration always continued till they were removed.

In one case a Mauser bullet remained imbedded in the lower end of the tibia above the ankle joint. The wound never suppurated, and healed in the ordinary manner. It caused the patient no trouble at the time, and he did not wish to have it removed—

Bullets should always be removed where practicable. When a patient recovers from his injury having a retained bullet, and returns to duty, the bullet is always a source of trouble to him, mental & physical.

It has been found where bullets remain in a soft part for a time that an adventitious capsule forms around them and a certain amount of broken down blood clot is contained within the capsule and is liable to infection. I met with one case where suppuration occurred around a retained bullet

some month after the injury, and the bullet had to be removed.
Fragments of bullets especially when of irregular shape or with sharp points always give rise to pain on movement, if embedded in muscular tissue and should be removed. It is often impossible to find small pieces of lead in a part even when they show up well in an X Ray picture. In cases where a portion of one bone of the forearm has been blown away with its periosteum, or is so extensively comminuted that when the fragments are removed, a gap of one inch or more is left, it is advisable to allow the wound to heal soundly and to wait sufficient time to see if repair is attempted. Where there is no attempt at repair the fractured ends should be resected, and a corresponding length removed from the sound bone. Both bones should then be wired through separate incisions and the limb rendered immovable.
G. S. Wounds. Joints.
Direct wounds of joints were rather rare. In a great number suppuration occurred but I saw many cases where a Mauser bullet passed through a joint and the wounds healed in a few days without any suppuration and with no permanent damage to the articulation. Joints were often damaged indirectly by a bullet fracturing the bone above or below the articulation and the fracture extending into the joint. In all such cases that I saw suppuration occurred and the joint had to be freely opened by two incisions, irrigated and drained. In the case of knee joints a vertical incision on each side of, and slightly above the patella

dividing the joint Capsule and of sufficient size to allow the passage of two large parallel drainage tubes from one opening to another was made. If these cases were then treated early and daily irrigation carried out, suppuration soon ceased and a fairly movable joint resulted.
In many cases where there was a suppurating wound near a joint, the articulation became infected sooner or later – and had to be dealt with as above described. In other cases when bone in the proximity of a joint usually on its distal side had to be scraped suppuration of the joint ensued. In prolonged suppuration of the knee joint. Relaxation of the internal lateral ligament occurs and marked "Genu valgum" is the result. Several cases of wounds of the elbow joint were observed – some of them did not suppurate but others did, and in these latter cases the joint was opened by an incision one other side of the triceps tendon, irrigated out and a tube passed through the joint. Tunneling of the articular ends of these bones was the rule without any actual fracture. In one case the head of the radius necrosed and had to be removed. The after results of elbow injuries were not good; limited movement being the rule – I saw a few cases of wounds of the ankle joint

where the main bullet must have passed through the articulation and no suppuration followed. One general officer at present in India is a case to point. In one case of a G. S. wound of the ankle with extensive damage to the lower end of the tibia and tarsal bones, with much suppuration — much necrosed bone had to be removed at different times, but the foot was saved to the patient with a stiff joint.
Amputation of any limb had seldom to be resorted to for G. S. wounds, and the few cases in which it was necessary were complicated with extensive vascular damage at the seat of injury.

G. S. wounds of large vessels.

G. S. wounds involving the main arteries and veins of limbs were rather rare, and a great many of them complicated with extensive bone damage. In dealing with the latter kind great difficulty was experienced in securing the vessels at the seat of injury, as all these wounds were septic. Amputation had to be performed had to be performed in all the cases I met with. Some were met with where there was no bone damage, but a traumatic aneurism was present either the circumscribed or diffuse form, the seat of lesion was cut down upon, and the vessel ligatured above and below the damaged spot. A good result followed in every case I met with. Extensive suppuration of a G. S. wound in the vicinity of a large artery in some cases led to secondary haemorrhage, the vessel becoming eroded; but whether its walls were originally damaged or not is

impossible to say. In such cases the vessel was secured in the wound by two ligatures and divided between them if possible — Otherwise it was ligatured above the wound.

G. S. wounds of nerves.

Many nerve injuries from G. S. wounds were observed — the following were the forms:

1. Complete division.
2. Partial division or stretching.
3. Compression from cicatricial bands forming round the trunk during the healing of septic wounds.
4. Various forms of neuritis, presumably from irritation of the trunk.

1. In complete division the paralysis was immediate on receipt of injury and when the nerve was cut down upon after the wound had healed there was found to be a bulbous condition of the distal part of the proximal end, and an attenuation of the upper part of the distal end which was soft and pinkish in colour. The treatment followed in all such cases was a removal of the bulbous part and a plastic operation after the manner of Hueter to join the ends. Sufficient time has not yet elapsed to see the final result of any of these cases.

2. In partial division there was always a considerable amount of

Cicatricial tissue binding the nerve to the surrounding parts. The treatment was to free the nerve completely and remove as much of the scar tissue as possible with a curved scissors and to close the wound. These operations must be carried out with the utmost antiseptic precautions and primary union secured. If suppuration occurs in the operation wound more cicatricial tissue will be formed and the result will be no better than if nothing had been done.

3. Where nerve trunks were surrounded with cicatricial tissue an attenuation of the nerve was always found resembling (a waist).

The treatment followed was to strip the healthy nerve with blunt hooks above and below the constriction and carefully dissect off all the scar tissue. In one musculo-spiral nerve which I treated as above the functions were restored almost completely after about 8 weeks. In the others sufficient time has not elapsed for the restoration of function.

4. In the forms of traumatic neuritis the method of operation was considered advisable. In no case was a nerve found imbedded in or pressed upon by callus.

Sgd. J. F. Longheed
Lt. Col. Rune

No. 1 G. H.
24-6-02

CLERKS
OFFICE


CLERKS
OFFICE

83

...ras

	Total.
	2
	2
	1
	3
	1
	1
	1
	11.

84

No 12 General Hospital

Table showing Admissions & Deaths for Medical diseases for years 1900, 1901 & 1902

Months	Admissions				Deaths			
	1900	1901	1902	Total	1900	1901	1902	Total
January		341	122	463		2		2
February		216	101	317				
March		278	117	395		1		1
April		140	122	262				
May	63	210	120	393			1	1
June	79	317		396	2			2
July	140	231		371		2		2
August	202	119		321	1			1
September	137	164		301	1	2		3
October	253	314		567				
November	312	273		585		1		1
December	328	194		522	1			1
Total	1514	2797	582	4893	5	8	1	14

No 12 General Hospital

Table showing Admissions and deaths of Officers for the years 1900, 1901 and 1902

Month	Admissions				Deaths			
	1900	1901	1902	Total	1900	1901	1902	Total.
January		10	17	27		1	1	2
February		12	14	26		1	1	2
March		13	9	22				
April		22	3	25				
May	5	14	11	30	1			1
June	20	17		37				
July	10	14		24	2	1		3
August	14	7		21		1		1
September	3	10		13				
October	14	6		20		1		1
November	12	13		25				
December	23	7		30	1			1
Total	101	145	54	300	4	5	2	11.

86

Tab
for

A

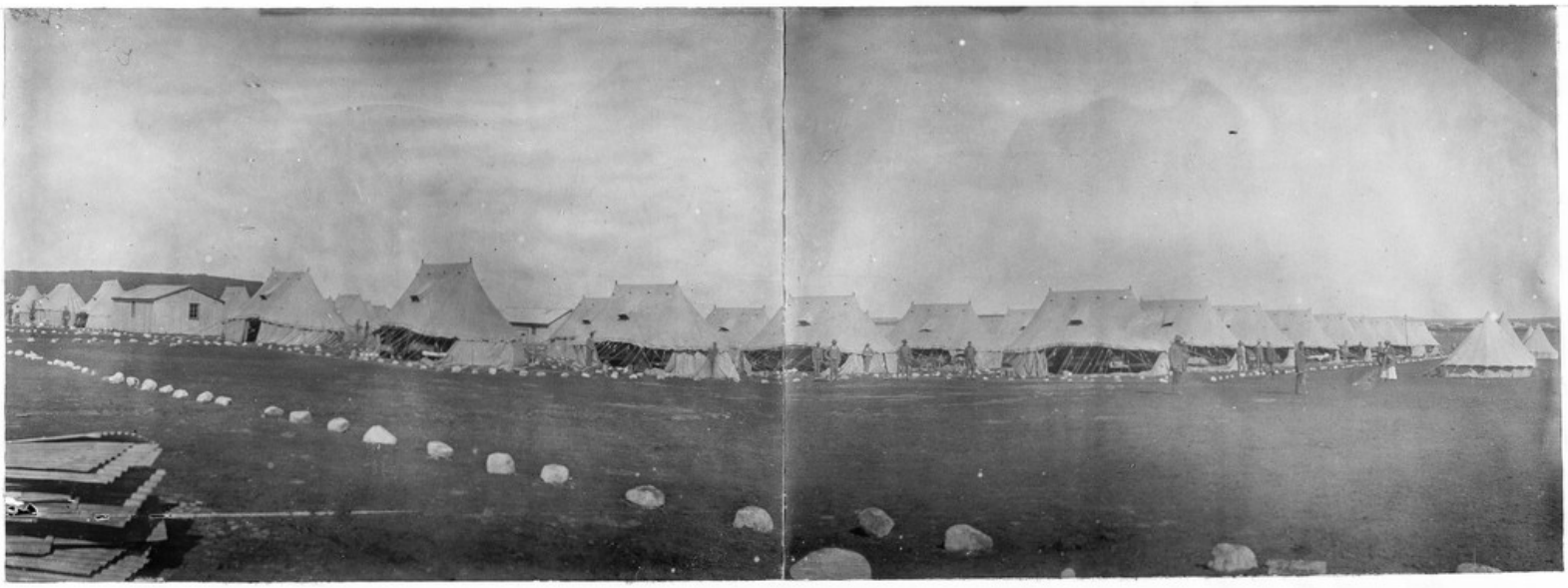
Jan
Fe
m
Ap
M
Ju
Ju
Au
Se
O
N
D

E

Report on Medical Division

General Remarks.

The Medical Division faces East & West and is composed of thirty three Marquee each tent containing 6 bed Hospital Marquees were the only types employed in this hospital for the treatment of the sick, and as the Work I think it a most admirable tent. The tortoise, so far as I know, has never been used in this hospital but, from what I saw elsewhere. I consider it inferior to both the the Marquee and the Indian E.P. tent. The Cubic space in it may be economised to a greater extent than in the other tents for a general hospital, which has to remain standing for many months if moved at all, I am sure & and the wear and tear to which such tents are exposed. The Stress of Wind and rain must tell on a tent of a shape so ill adapted to stand this strain. The equipment of the Medical Division of this hospital has been most complete and has left nothing to be desired. The nature of the tent floors has varied - in some Marquees wooden boarding has been used in others tarpaulin has been laid down as they are found. Personally I prefer the tarpaulin floor the surface is as readily cleaned as boarding, and there is no fear of it becoming a dirt trap, which is often happens in the case of boarding. Arguments for and against tarpaulin flooring really rest on the question of the surface drainage, if this is well carried I consider tarpaulin



incomplete by the best Material, and in the hospital the Surface drainage has been most admirably Carried out. And in the worst days Rain I have never seen any tendency to flooding of the tents -

Jaundice -

There were 210 admissions for this affection, & on period in the early part of this year the admissions were so numerous - that the Complaint assumed quite an Epidemic form and the admissions under this heading formed a large percentage in the medical division, & most of the admissions were transfers from other hospitals, & would be difficult to calculate the districts from which the patients were drawn, and, in any case, the numbers would not be sufficient to give a reliable statistical table, but generally speaking they came from the North of the Orange River Colony.
The Cause of this almost Epidemic spread of Jaundice must be largely conjectural and one was surprised to find that in the majority of the cases, there was a history that the Complaint Came on "While on trek". This is difficult to explain as a rule Jaundice being associated with Sedentary habits
The Complaint was undoubtedly of the Inflamatory variety, that is to say Connected with Inflamation of the Duodenum, or lining Membrane of the Duct.
The predisposing Cause probably Came under the Same heads. Dietetic or Exposure

or perhaps a combination of both.
A prolonged course of meat and biscuit
with little to vary it in the shape of vegetable
diet taken continued with exposure in the
open, & varying degrees of temperature
loomed largely, account for the severity
of the complaint - The weather at the
time, when most of the admissions took
place was hot, and dry at least in the
daytime, but at times it was wet, dusty
and generally disagreeable
It is probable that the effects of exposure
which was incidental to the work on which
the men were engaged, was almost certainly
the most provocative cause, but at the same
time it was distinctly seasonal, as all
the cases came on both a rush, and during
quite a limited time, and then suddenly
dropped off. I do not know sufficient
of the climatic peculiarities of this
Colony, to report if jaundice prevailed
at the time of the year when these admissions
took place, among the civilian popu-
lation, but from the few enquiries I have
been able to make I am led to believe that
this is so.

Treatment. Rest in bed, milk diet and regulating
the bowels are the first desiderata, a mixture
of Chloride of Ammonium and Nitro-Mur-
iatic acid BiP has appeared influence
in coaxing the liver back to its normal
function. The inflammatory condition
of the bile duct is no doubt primarily
due to some perverted action of the
liver and the salts and acid mixture
certainly tends to antagonize this
freeing the liver function by diuretics
which empty the bile duct, such as
Blue pill, Podophyllin &c &c is I am sure

not sound practice, the liver in this stage of the affection being in a state that bile indifferently formed – and to free it at this stage would only aggravate condition of affairs –

Rest in bed in the early stage is absolutely essential though with a patient of active habits this is often difficult to attain, the prevalent idea that an attack of Jaundice can be "walked off" in a day or two, still largely holding ground, but true physiological rest for the liver cannot, I am sure, be attained without rest in bed

Pneumonia

There were 52 admissions under this disease, the type being the lobar form of Pneumonia out here, and it is a little difficult to understand how the true disease can arise, looking at it from a purely infective point of view. It is now generally admitted that in every case that shows the physical signs of lobar Pneumonia the Micrococcus Lanceolatus, or one of its allies will also be found in the bronchial secretion, and the question which arises in ones mind is, as to how this microbe can infect isolated cases, a patient for instance is admitted into hospital off a marching column for Pneumonia, having lived for months past a healthy active life free from any infective house or locality, how is it possible that he can have become infected with one of these germs?

I have treated only a few cases of Pneumonia in this country, and I was never convinced that they were typical cases, and one had no means of investigating

the Specific Character of the affection, the cases were treated as if they were true Pneumonia but certain characteristics were deficient - the Expectoration was never bulky and occasionally only blood stained, the facies of the patient also was not typical, the physical signs were dulness over affected point, but the crepitations were less, and no distinctive as one sets in the typical cases in Europe, and the convalescence was much more rapid, the physical signs clearing up very rapidly -

I am inclined to believe that the so called Pneumonia that was admitted from marching Column were really acute Congestions, originating from exposure to cold & wet. Even Congestion of the lungs is now limited by many observers to a specific origin, and there is no doubt that this is distinct Pneumonia and they were in fact to reject the possibility of Pneumonia arising Congestion arising from severe exposure and all the latest investigations on the subject would tend to emphasize this view, there is then all the greater difficulty in marking down the origin of these cases. I have had seen a fatal case of so-called Pneumonia or lung Congestion of where I can't pronounce to think that the type is less severe than in Europe or that the Climate is more favorable for its treatment

The treatment was much on the same lines as that adopted for the treatment of this affection at home, but I think there is no question that nothing like the same amount of stimulation is

necessary in this Country, the heart rarely showing any signs of distress

Bronchitis

There were 17 admissions under this heading the majority of cases being dealt with by the air of the upper veldt & Nat Medicine & Rapid Convalescence after affection, and the Cough remain for a very long time. the patient frequently requiring Change of air & the sea side before he can get rid of it.

Liver Abscess.

Liver abscess which are met with in this Country appear to be more frequent than in multiple than they are in India and other tropical Countries the origin of liver abscess has always been a fruitful source of discussion, the discussion practically resolving itself into the question as to whether it can arise without dysentery or other lesion of the bowel or whether it can arise without this focus of infection, Personally I have never known, an abscess of the liver develop either in this Country or in the Tropics without a previous history of dysentery, I believe an attacked dysentery however slight may be the origin of a liver abscess, in fact it is the slight cases of dysentery that constitute the most serious danger & most infection, A man suffers from a slight attack of dysentery with only a little slime and mucous in his stool of so slight a nature that he does not even seek the services of a doctor, but doctors himself on Opium, Chlorodyne

or any of the other drugs which the general public have now become familiar with and the discharge stopped, there is no reason to think that the slightest attack of the disease may not have all the pathological significance of a more prolonged attack and that the amoeba coli would have the same potency in one or the other. It has certainly appeared true that liver abscesses arise much more frequently after those cases of dysentery which have been improperly treated, either treated by the patient himself, or owing to the fact that he was far removed from skilled medical advice at the beginning of the attack.

A patient who has had his dysentery treated in the approved method, with calomel, ipecac, and so on incurs in my opinion very little chance of after infection in the liver. I cannot say whether this is a personal experience of liver abscess in this country with regard to the multiplying of the abscess would be borne out by statistics, but I am inclined to think that would be the case. Why this should be so, this difficult to say - as dysentery in this country is certainly not the severe affection that it is in the tropics, and true recrudescences of any severity is comparatively rare - in fact many observers look on much of the cases which occur here, as attacks of colitis, although with our slight knowledge of the bacteriology of the disease it would be a bold man who would say that a colitis might not also be infective, arguing however on purely objective grounds it would be much more reasonable to assume that infection of a severe order would

arise from the slight attack of dysentery as met with in this Country.

W. L. Reade,
Lt Col Ramc.
I/c Medical Divn.
1/2 Genl Hospl.

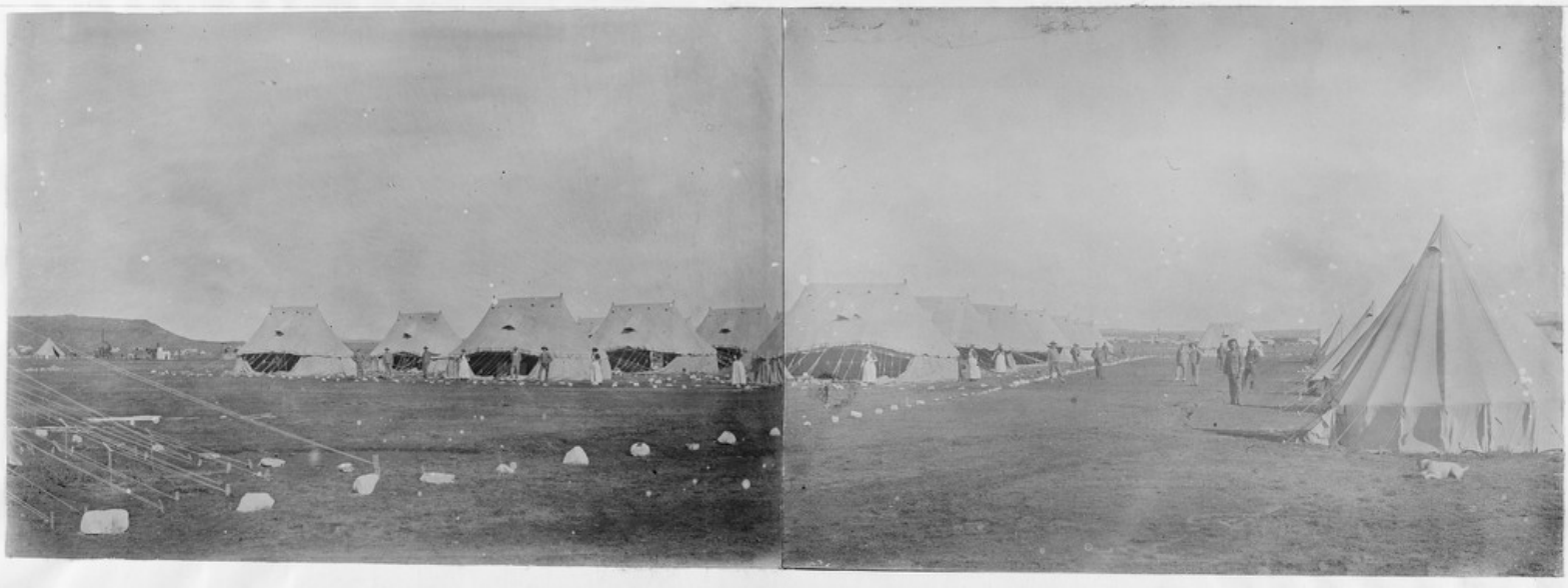
Ipe
14th June 1902

No 12 General Hospital.

Table showing Admissions & Deaths from cases treated in the Enteric Division for the years 1900, 1901, & 1902.

Months	Admissions				Deaths			
	1900	1901	1902	Total	1900	1901	1902	Total.
January		166	127	293		12	12	24
February		93	176	269		4	15	19
March		37	120	157		2	7	9
April		55	94	149		3	8	11
May	6	20	66	92	4	.	3	7
June	47	25		72	3	.		3
July	80	25		105	10	6		16
August	202	16		218	20	1		21
September	120	112		232	18	18		36
October	232	97		329	23	20		43
November	297	154		451	24	17		41
December	264	205		469	12	27		39
Total.	1248	1005	583	2836	114	110	45	269

(a) Lung affections.



Report on Enteric Division

The Enteric Division of No 12 General Hospital was first formed under Lt Col Keogh and consisted of 12 marquees. Each containing 8 beds, which number was later on reduced to 6. In addition there was one store marquee containing 16 beds the floors were covered with tarpaulin when the Hospital was taken over by Col Duke the tarpaulins were taken up and wooden bottoms put down, some of the marquees were doubled making wards for 12 beds. This was a good arrangement during the warm weather, also requiring fewer orderlies - but in the bad weather was by no means satisfactory

The first cases of Enteric Fever were of a very severe type, the Clinical symptoms being intestinal haemorrhage, and rapid Cardiac failure, at this time I detected some cases with symptoms of Scurvy, as more hospitals were established further with the number of patients were decreased, when the system of Mobile Columns came into operation the number of patients rapidly increased, especially as the fighting was for a long time the Base of Operations these Cases were generally of a severe Class and aggravated by having to be sent long distances in Ambulance waggons across rough Country

The Complications most Common with the Enteric Fever here have been.

(a) Lung affections —

1. Pneumonia rarely attacking both Lungs
2. Bronchitis, usually mild in Character.

(b) Gland affection
There was at no period a regular Epidemic of inflammation of the Parotid Glands usually Single. Some of the Glands Suppurated necessitating free incision. Several Case had both Parotids attacked at the same time, and with one or two exceptions had a fatal result
Other Glands affected were those in the Axilla and Groin, but were not Common

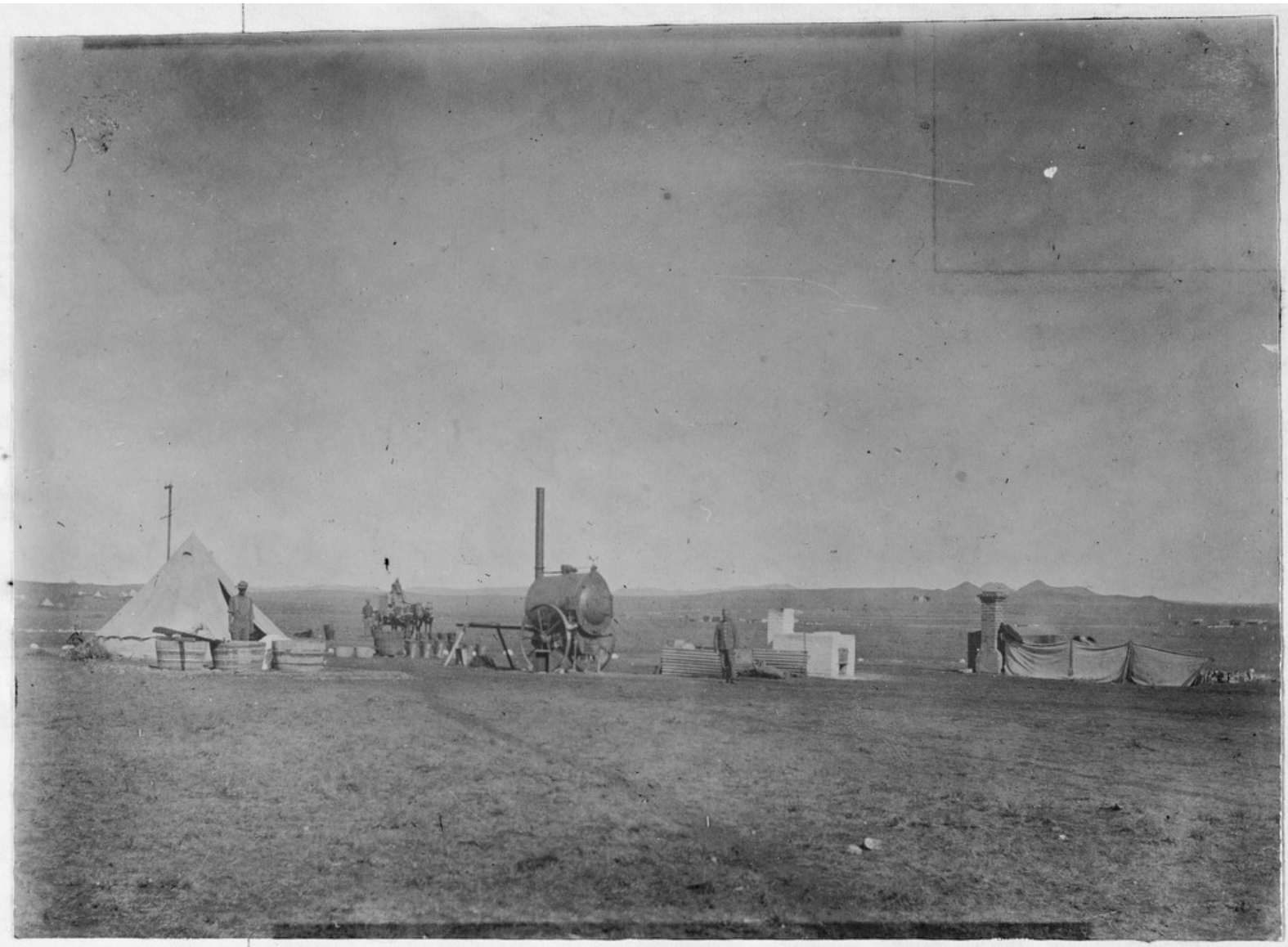
(c) Thrombosis Generally attacking the left leg was Common. Usually occurred about the fourth week with very Severe pain and edema of the foot and ankle, in some Cases the patient was not affected till he was up a few days, and then the pain was confined to below the knee

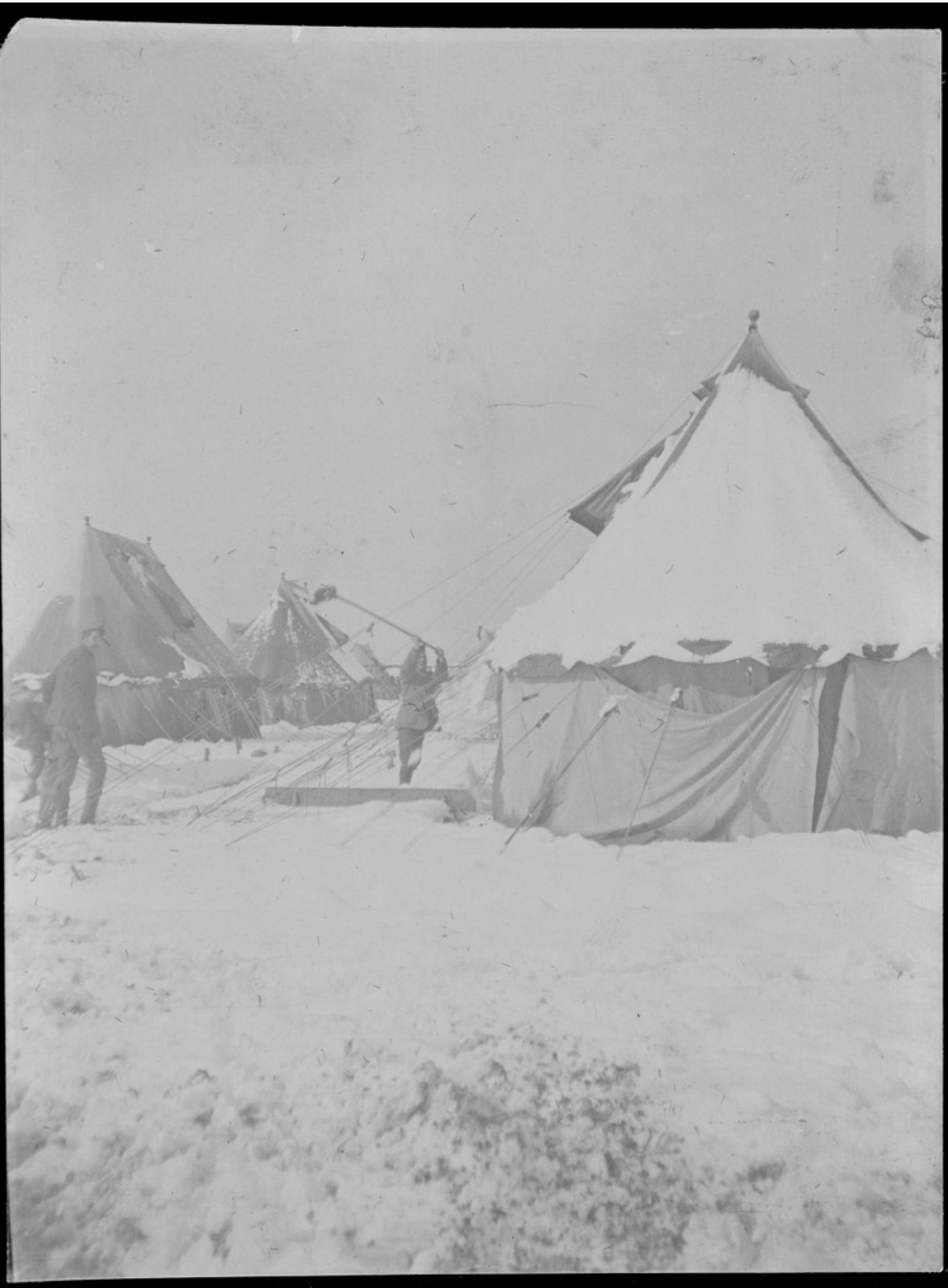
(d) Brain Symptoms. There were Several Cases of Meningitis, the delerium Common to the fever was usually of a quiet Character and the number of patients who suffered from it small.

(e) Abdominal troubles,
Were Confined to flatulence, Splenic pain, diarrhoea & Constipation Jaundice, retention of urine & Intestinal haemorrhage. At one time a large number of patients had jaundice with the Enteric attack, in one case P.M. found thickening and inflamation of the neck of the Gall bladder A great number of Cases had Severe diarrhoea & Dysentery, following the Enteric attack the motions Consisted of Blood, Pus & Shreds of intestinal membrane, it was very obstinate to Control.
During the fever more patients suffered from

Constipation treated from diarrhoea
by the Cases of Retention of Urine Catherization
for two or three days required
Haemorrhage from the bowels was more
common during the earlier stages of
the war probably because patients had to
be carried longer distances before admission
to hospital,
In fifteen Cases where death occurred
from perforation P.M. examinations
generally showed several perforations
rarely a single one. and they were placed
side
In the Division several wards were set
apart exclusively for the treatment of
Dysentery the Cases were not as a rule
of a severe nature,
The treatment by Ipecac Sulph only answered
in those Cases which came into Hospital
soon after the beginning of the attack
The treatment by Ipecac Opium and
Ammonia answered well.

Disinfecting Arrangements —
For a long time the Enteric stools
were destroyed by dry incineration
a large hole was dug in the ground
about fifty yards from the Division &
and pan piece of ground and a fire
was kept constantly lit in it. Into the fire
the secreta were turned having been
previously mixed with Chopped straw
and Chaff. the accumulated ash was
taken away and buried further out.
the disadvantages of this method were
that in wet weather the pit sometimes
got flooded, putting the fire out also the
supply of fuel for burning both the Secreta
was not constant Urine and Slops were





were also treated in the same way.
The present arrangement introduced by Col Somerville. Camp is as follows.
The stools brought by the orderly from the ward in a bed pan, and taken to 4 pails of buckets about 100 yards from the division. Next which is a tub containing lysol. he puts some of this lysol into the bed pan, then empties the contents of the pan into one of the buckets, the bed pan is then disposed into lysol, then washed in water, taken back, and stood on the shelf outside the ward ready for use again
The Buckets into which the stools are emptied are cleared out into two boilers which are constantly kept at boiling point. These boilers are emptied into a number of special buckets. A large iron tank is carted round twice a day and the sterilized excreta are taken away unit and buried a distance of two miles outside the Camp. Urine and slops are treated in the same manner there is a special two pails buckets for the urine and one for slops. Pails used in washing the patients, these buckets are emptied into the sterilizer and the contents boiled with the bodies, and disposed of with them
The above arrangement works in a very satisfactory manner there being practically no offensive smell from the sterilizer, the excreta are rendered harmless for spreading further disease and it is particularly good with regard to urine & slops. the chief part of which is evaporated.

When patients are convalescing they

they are transferred to a special section of the hospital as they belong. Require bedpans, a special latrine is set apart for them conspicuously marked. The buckets of this latrine are brought to the steriliser and the contents treated in the manner as previously described.

Linen disinfector

The soiled linen is steeped in tubs containing a solution of Perchloride of Mercury (1 in 1000) after being well soaked in it for four hours it is taken out then spread on the ground till it is dry after which it is put through a Thresh Machine for about 30 minutes then packed up and sent away to the wash.

Inoculation.

The number of patients suffering from Enteric Fever who have been inoculated has been very small. No statistics as regard effect of inoculation are available. Those patients who had been inoculated usually had a modified attack both as to temperature. Patients who had been twice inoculated were very rare

Treatment

I have tried all the best recommended treatments in Enteric, but came to the conclusion that none of them gave any benefit so I stopped them and treated simply the symptoms and found that the patient did just as well.

I consider the only things necessary are feeding, perfect rest, plenty of fresh air

and stimulation according to the case

Diet -

The diet during the fever stage consisted of 4 pints of milk in 24 hours, with the exception of the beginning and end intervals we have been able to give the patients fresh milk a farm with several hundred milk cows under control of A.S.C. and about 3 miles out supplying this milk.

This was in cans morning & evening and sterilized in a specially built house in the hospital containing the sterilizer, when not able to get fresh milk, tinned was used, the ordinary dilution making about 2½ pints of milk. Patients did very well on this of the two sorts sweetened & unsweetened the latter was preferable, patients soon tiring of the sweetened.

During convalescence, beef tea, custard, eggs, etc were given, there being always a plentiful supply. There was generally a good supply of fresh chickens available.

Site -

The Enteric division is situated in an open space to the left rear of the rest of the hospital about 200 yards. The ground slopes to the south west on account of the proximity of kopjes, there is in wet weather a great flow of water, necessitating extensive drainage to keep the site dry. All the marquees are trenched round with leads off into two long drains running one each side

of the division, Outside the division on the right is a drain 2½ feet wide and 3 feet deep which carries all rain water from the slopes at the back of the division, The marquees at the rear 27 in number are arranged in nine parallel rows of 3 each, separated by paths 6 feet wide, each marquee contains 6 beds, 1 table, 1 form 6 bedside table, there are four tub pans 4 water bottles and 6 chamber pots in each ward, which I consider the very ample provision for the patients the supply of blankets, bed linen, Handkerchiefs has been ample Each Bed having 4 blankets and another one always available for Cold nights. The bed linen has been changed at least twice a week, and always immediately when soiled.
In addition to the marquees for the men a separate marquee was pitched on the right front and equipped for Officers suffering from Enteric Fever, a great many little extra Comforts being added.
On the right flank of the division 2 bell tents are for the duties doing duty in the division, A tent for the accomodation of the ward Master, and one marquee for storing linen & issuing the extras from A Canvas house Containing one room was built by Col Somerville- Corps to accomodate the night Visitor on duty in the division, and has been a great comfort in the Cold weather -

25/6/02

R. Coltbood
Asst Surgeon 10th L.R.

Cases of Enteric Fever -

No 4964 Pte W Manchester 1/Suffolk. Regt was admitted on the 10th Dec 1900 having been transferred from Bethune on admission, he was found to have a temperature of 103·6, a dry and furred tongue, the Edges of which were clean, abdomen distended, and tenderness in the right iliac fossa He was suffering from diarrhoea, having four motions which were characteristic of Enteric Fever. He Complained of frontal headach, On further examination, his Spleen was found to be enlarged, there were no spots observed on the abdomen his pulse was quick (92) and soft. On the 11th inst his morning temperature was 103·6 and in the evening 103·2. his Condition remaining about the same, he had a slight attack of epistaxis in the evening On the morning of the 12th inst at 8 am he Complained of acute pain in the region of the left femoral vein & rapidly collapsed. the pulse being almost imperceptible, On examination the leg was found to be greatly swollen over the upper third, Acutely tender and the skin red, The patient gradually grew worse, Respiration becoming rapid and sighing. the facial muscles left side started to twitch, and he died at 10·6 am of Syncope

He had not been inoculated

Post Mortem appearances

General Condition well nourished.

Heart. Left ventricle hypertrophied.
Ante mortem clot was found adherent
to the auricles-ventric valve left heart
the right ventricle was slightly dilated
and full of blood clot. Lungs normal
Spleen enlarged and congested and
mahogany brown colour -
Intestines, normal except at ileo-
caecal region where there was some
congestion -
Brain right hemisphere congested
Left thigh considerable swelling
femoral vein blocked, clots extend
for about an inch, also the profunda
vein beneath the adductor longus

Other systems normal

2.

No. 14668. James Robinson. Py. was
admitted on the 28th-8-01, with Enteric
Fever, the attack was of a very severe
nature characterised by the very
pronounced anaemia which resulted
On admission he had a temperature
of 102'5. thickly furred tongue, quick
pulse, and diarrhoea of typical nature,
for the first 12 days, the temperature
remained about 100° in the morning
with an evening rise to 103°; on the
5th Sept. he had a rather severe rigor
with great perspiration following this
resulted in the temperature becoming
very irregular Morning to sub-normal
in the morning, & gradually rising each
night - on the 13th 14 & 16th inst he had severe
rigors with great falls in the temperature
During this time he was slightly delirious
quiet in character, all through the

the pulse remained about an average 90, except occasionally when it became 116. but it was soft & weak, From the 17th Sept the temperature ran a remittent character generally being normal in the mornings, there were no abdominal symptoms, the diarrhoea ceased from the 15th Sept and the bowels became fairly regular, During the month of October he was subject to headache great prostration and had an occasional rise of temperature to about 100. He became during this time very anaemic a bruit being audible on auscultation, He got up on the 1st Nov. having been 75 days in bed. Iron tonics & liberal diet improved his condition greatly, he was subsequently invalided home

A Number of Blank Pages Follow, which have not been Photographed.