

AWM4

**Australian Imperial Force unit war diaries,
1914-18 War**

Medical, Dental & Nursing

Item number: 26/80/10

Title: 5th Australian Sanitary Section

May 1918



AWM4-26/80/10

CONFIDENTIAL.

ORIGINAL.
DUPLICATE.
TRIPLICATE.

Australian Imperial Force.

WAR DIARY

OF

~~5th AUSTRALIAN SANITARY SECTION~~

FOR

MAY 1918.

Signature of Officer compiling

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Signature of Officer Commanding

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WAR DIARY

Army Form C. 2118.

Instructions regarding War Diaries and Intelligence Summaries are contained in F. S. Regs., Part II. and the Staff Manual respectively. Title pages will be prepared in manuscript.

or INTELLIGENCE SUMMARY.

(Erase heading not required.)

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
			Resumes for the month.	
DAOURS. (Woolen Mills)	1-4.		Strength 10ff. 27 O.R. 2. attached. Ford Box Car No1987 5. Side Car Combination at Workshops. Area consisting of B. Div Area, Bussy-Dacours Area and the Les Alencons Area. B. Div area occupied by the 5th Aust Div. Area being supplied from Dump of Sanitary material found in Corbie. Owing to a second case of chicken-pox in the Unit it was considered advisable to move the Unit from the Woolen Mills Dacours owing to the number of troops there, to the town of Dacours. Modification of B. Div area. Blagny-Tronville and La Motte handed over to the 4th Aust Sanitary Section. Post of I.N.C.O. and 4 O.R. withdrawn from Blagny Tronville. Unit moved into Billets at Dacours.	
DAOURS. (village)	5-20		Workshops opened at Dacours. Arrangements completed with the area Commandant of the Bussy and Dacours areas to have an area sanitary system. Public Incinerators put into action, and Town Garbage systems instituted. Manure Dumps located. Street cleaner salvaged from Corbie and used in Dacours. Area improving gradually during this period. Flies make their appearance in greater numbers. Large amount of shelling in the forward areas particularly around Aubigny, Pouilloy, Corbie and Hamlet. Intermittent slight shelling of Dacours increasing during period. Epidemic of Influenza in the Unit, illness of short duration about 48 hours. Three-quarters of Unit affected. Sanitary Arrangements received from D.D.M.S. Aust Corps with map showing the various Sanitary Areas. Camon-La Motte-Rivery Area added to this Units Area. Arrangements made with Area Commandant Rivery to take over billets in the Rivery Area.	
RIVERY. Sheet 620. M.9.a.8.8.	21		Heavy Shelling of Dacours at 7am. Unit moved to new location at Rivery during the day. Forward Post of 2N.C.Os and 90.R.s left as Forward Post at Bussy for the inspection etc of the B. Div and Bussy areas. New billet on side of the Hortillionages of Amiens where there are many gardens of green vegetables, and canal etc.	
	22.		Inspection of the new area commenced. Area Commandants interviewed. Arrangements made for a system of Sanitation for each town. Workshops opened at new location.	
	23-30		Arrangements completed with Area Commandants for Sanitary Systems at La Motte, Camon, and Rivery, as in the Bussy area. Public Incinerators arranged and completed at each town. Garbage system and Manure dumps. Arrangements made to have the Street Cleaner taken from Bussy to La Motte, where it is more required.	
	31		D.D.M.S. Aust Corps called to inspect the unit, during the morning. Monthly report rendered. Delouser recommended by the D.D.M.S. Army on the Russian principle inspected with the D.A.D.M.S. 5th Aust Div at 77th Sanitary Section. Saloux Plan and original correspondence regarding this and the original experiments attached to the Diary.	
			Strength of Unit 1.0ff. 31. O.R. 2. attached. Reinforcements during month 5.O.R. 1. O.R. returned to Australia. 1. O.R. evacuated to Hospital (Varicella).	

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WAR DIARY

OF

5th Australian Sanitary Section

FOR

May

1918.

LIST OF APPENDICES.

No.	Subject.
1. ✓	Monthly Sanitary Report for May 1918.
2. ✓	Graph of Work done during month
3. ✓	Synopsis of work carried out during month
4. ✓	Instructions for chlorination of water in petrol tins etc
5. ✓	Routine working of 5th Aust Sanitary Section.
6. ✓	Unit Inspectors Map.
7. ✓	Pro-forma of Inspectors Report
8. ✓	Copy of a Covering Report
9. ✓	Fit for Drinking Notice
10. ✓	Tested Poisonous Notice
11. ✓	Unfit for Drinking Notice
13. ✓	Pro-forma water Report.
14. ✓	Water Map (Attached to Water Report)
15. ✓	Instructions issued to Water Picquets
16. ✓	Correspondence in reference to Russian Pattern Delouser Plan of attached.
17. ✓	Copy of page of Water Report on a village sent to Water Supply Officer Aust Corps on (CAMON)
18. ✓	Balance Sheet and Cash Statement Canteen.
19. ✓	Cash Statement, Regimental Funds.

5th AUSTRALIAN SANITARY SECTION.

Area comprised B Divisional Area, Bussy and Les Allencons area until the 10th inst. when Camon, Rivery and Lamotte Areas were added. During the month work has been slightly hampered by the fairly considerable shelling and gassing of the areas. Owing to constant shelling it was necessary to change location of unit from Dacours to M 9 a S.8. sheet 62d on the 22nd instant. Graph shewing work done during the month is attached. Figures for week ending 20th May do not represent actual work done by unit in area as almost three quarters of Unit's instigators were ill with influenza.

Following is report on the various areas:-

A. "B" Divisional Area.

This area has been divided by 5th Australian Division into two sub-areas - North Area including La Neuville, Vaire, Corbie and Saily le Sec; Southern Area including Aubigny, Fouillioy, Hamelet. Blangy-Tronville and La Motte were in area for short period at the beginning of the month but this portion was handed to 4th Aus. Sanitary Section.

1. BILLETS.

Trenches and shelters mainly; few billets. Towns are practically unoccupied; owing to the large amount of ~~evacuation~~ accommodation there is no overcrowding. General condition satisfactory. In the whole area villages have been evacuated by civilian population. Many of the houses are in a disorderly condition and in many the middens are insanitary and require drainage. In occupied billets the units concerned usually render their surroundings and billets as sanitary as possible. Special fatigue parties were requested from Division to attend to the drainage of Aubigny; this party also buried 150 odd horses in the area during the early part of the month. The Division in occupation, sub-area Commandants and units concerned in this area have made great improvement during the month. The sanitation of the various towns in this area, being unoccupied, under present conditions presents great difficulty.

2. WATER SUPPLY.

In all cases deep and shallow wells. Corbie has some rainwater system supplies in houses.

b. Chlorination - all wells in Fouillioy, La Neuville, Etampes, many wells etc in Corbie and several in Hamelet have been inspected and labelled. Several water carts tested daily. Owing to large number of sources of supply the control of chlorination is practically impossible. Instruction was given to several Transport Officers in regard to the chlorination of water and petrol tins.

c. Water points - There are no water points in the area. There are a number of wells in the various towns which are being used for drawing water in water carts.

4. BATHS.

There are two baths in this area - Corbie and Dacours. They are both controlled by the 5th Aus. Div. Dacours Baths is run in conjunction with the gas centre at the 14th Field Ambulance. Dacours Baths can cope with 2000 men daily and Corbie Baths with 100 men per hour. Both are in excellent working order and an excellent device has been installed by the Officer in Charge which saves water and fuel. Each individual shower can be used independently. Changes of underclothing are provided and a Foden Lorry works in conjunction with the baths at Dacours.

5. LAUNDRIES. - NIL.

6. DISINFECTION - Several units have had various quarters disinfected during the month in cases of infectious disease. In cases of infectious disease the case and location is notified to the Unit by A.D.M.S. of the Division concerned and the Sanitary Section attends to the necessary disinfection.

7. LATRINES AND URINALS. - A large dump of latrine seats and buckets was found at Corbie and put to good use. Fly proofing of latrines in this area is practically complete. In the forward area the bucket system is in use. There is a sewage system at Corbie. Civilian latrines are not being used.

8. REFUSE DISPOSAL - Mainly by burying.

9. STABLES AND HORSE STANDINGS. General condition good. Manure disposal by stacking. Manure is used by most units in conjunction with mud to form bomb proofs around horse lines.

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B. BUSSY AREA.

1. Billets. Billets and shelters. General condition good. No over-crowding.
2. Water Supply.
 - a. Nature of supplies-- Deep Wells.
 - b. Chlorination. All wells in Dacurs and Bussy tested and labelled.
 - c. Water Points. 800 gall., tank and stand-pipe connected to deep well at Bussy.
7. Latrines and Urinals. Flyproofing practically complete in area except for a few units which should be completed shortly.
8. Refuse Disposal.
 - a. Methods of collection and removal. A G.S. wagon detailed by the Division calls at all houses daily and takes refuse to the Public Incinerator.
 - c. A street cleaner was salvaged from Corbie and is used in Bussy and Dacurs.

These arrangements are controlled by the Area Commandant.
9. Stables and Horse Standings
 - a. General Condition Good.
 - b. Manure Disposal. Public Dump at Bussy and two at Dacurs. Units are in some cases using their manure with earth for bomb proofing.

C. LES ALENCONS AREA.

There are very few troops in this area.

1. Billets and other quarters. Billets and shelters. General Condition very satisfactory.
2. Water Supply.
 - a. Nature of supplies. Deep Wells
 - b. Chlorination. Chlorination carried out by units themselves in all wells used
 - c. Water Points. Several very good and deep wells are in this area, particularly one at Chateau Les Alencons, where an electrically-driven pump is used.
7. Latrines and Urinals. Flyproofing practically complete.
8. Refuse disposal. By individual units by incineration.
9. Stables and Horse Standings. General condition good. Manure disposal as in B.

D. CAMON AREA.

This area is subdivided into three sub-areas- Rivery, Camon and La Motte.

1. Billets and other quarters.
 - a. Nature. Billets, shelters tents etc. General Condition fair. Civilian population is practically evacuated. Majority of the houses are unoccupied.
2. Water Supply.
 - a. Nature of Supplies. (i) Rivery. Main Amiens Water supply. Standpipe and street fountains. The main has been broken during the latter part of the month by shell fire and is being repaired by the French Authorities. There are also a few wells in the houses and some deep wells on the outskirts which act as a subsidiary supply. (ii) Camon and La Motte. Well.
 - b. Chlorination. Majority of the wells in these villages have been tested but not yet quite complete.
 - c. Water Points. Nil in area. see General Remarks.
4. Baths.

3rd Aust Div Baths at La Motte. There are 12 sprays and it is capable of accommodating 250-500 men daily. Change of underclothing provided.
7. Latrines and Urinals.

Fly-proofing of latrines in this area is not yet complete. In Rivery the sewage system is not in use. The area-commandant and all units concerned have been notified that civilian latrines must not be used; special arrangements have been made during the time since the Unit has taken over to provide adequate out-door accommodation in this area. Fly-proofing of latrines in Camon Area is not yet complete. There are about thirty units who have still open latrines.
3. Refuse disposal.

There are two Public Incinerators at Camon and one each at Rivery and La Motte. A G.S. Wagon calls daily at billets at Camon and La Motte and carries refuse to these public incinerators. This is done by individual units at Rivery. The system is under the control of the various area-commandants; and the incinerators are in charge of P.B. men supplied by the Area Commandants Staff.

and Horse Standings.

satisfactory. The condition, however, of the horse lines on the Canon and La Motte Road is not entirely satisfactory. Special attention is being directed to these and the A.D.M.S. 3rd Aust. Div has been advised. A Unit of the 4th Aust Div was recalled to this area to render its vacated lines sanitary. This was done through A.D.M.S. 4th Aust Div.,

E. GENERAL REMARKS.

Inspection has been carried out to include all units forward to Batt Headquarters in the line.

1. Water Supply.

a. Maps of all villages etc in the area and descriptions of the various wells will be forwarded under separate cover to D.D.M.S. Aust Corps for the information of the Water Supply Officer and to the Area Commandants concerned as soon as Canon and La Motte are completed to complete the area.

b. The control of chlorination in the present area is practically impossible owing to the very numerous sources of water supply. It is recommended that A.D.M.S. of Divisions issue instructions to all units regarding the chlorination of water in petrol tins dippers etc. Attached is a copy of the usual instructions and the measures worked out by this unit for practical purposes.

c. There is only one water point in the area, i.e. at Dussy. All wells particularly suitable for water points will be specially mentioned in the reports to be forwarded later.

d. During the last week the number of wells labelled has decreased as the supply of printed water notices has given out and it has been necessary to make special notices for the purpose.

e. Several Units in the vicinity of the Canon La Motte Road have been reported to be using the water from various adjacent lagoons etc. This matter has been reported to the A.D.M.S. of the Division.

2. Food and Cooking.

a. quality good. Variety fair. A certain amount of green vegetables are being supplied by Divisions and many Units are supplementing this by purchase.

b. Units are being induced to supply themselves with fly-proof safes where necessary. An indent is outstanding for buttercloth which will be issued to the units requiring it. It is hoped to be able to make a limited supply of these.

c. Sanitation of cookhouses, speaking generally, is satisfactory.

3. Bathing.

Units located close to the Somme etc are making good use of the river for the purpose of swimming and bathing.

4. Stables and Horse Standings

With the incorporation of manure in bomb proof and mixed with ~~pld~~ earth, when properly carried out this is quite sanitary and does not provide a breeding ground for flies. An excellent example of bomb proofing built up in this manner can be seen at the S.A.A. Section 5th Aust Div at Rivery.

5. Infectious Diseases. A very marked epidemic of influenza occurred in the area during the month. The illness was of short duration generally about 48 hours. A few cases of mumps and one case of Dysentery was reported.

6. Latrines and Urinals.

In conjunction with Area Commandants provision for public latrines has been made at Rivery, Canon, La Motte, Dussy and Dacours.

7. General Remarks.

Flies have made their appearance in numbers during the month. Special attention has been directed during the month to the flyproofing of latrines, the disposal of manure and the covering of food. Incinerators for public use of the open type have been put down at Rivery and Dussy-Dacours. These cope with refuse in large quantities and are entirely satisfactory. In smaller scale units are being recommended to install this type. Besides their excellence practically no material is required to build them. A special de-lousing device was viewed at the 77th Sanitary Section and it is intended to erect several at various units in the area and to have one placed at the baths at Dacours.

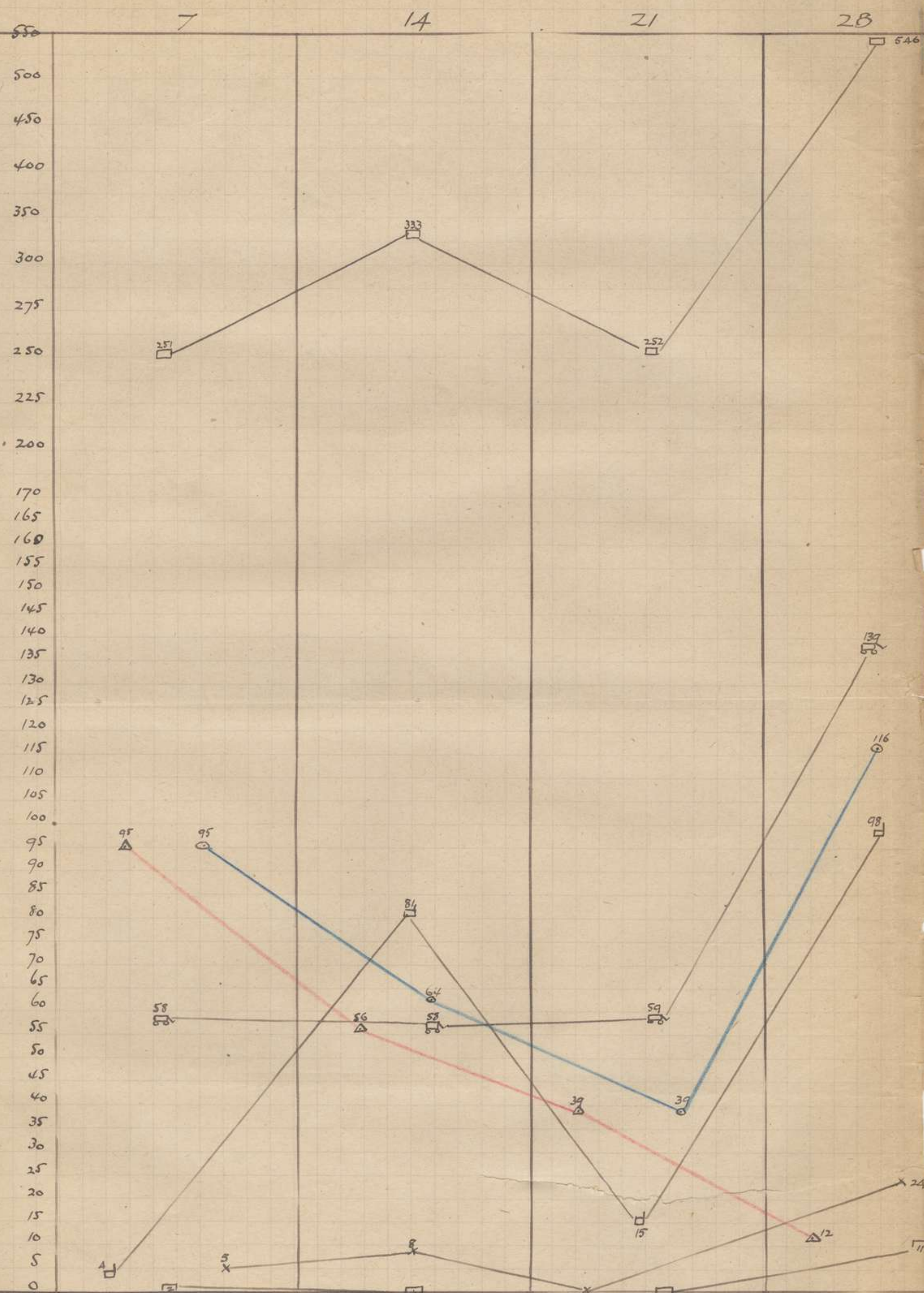
M. J. H. M.
.....Major.
O.C. 5th Australian Sanitary Section.

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Right Corps Forward Area (Centre Sub-Area) Aust. Corps

Appendix 2
1918

Week ending May



Legend:-

SANITARY SECTION.
5th
AUSTRALIAN DIV.
No.....
31/5/1918

Billets Inspected
Horse Lines
Wells, Pumps & W.P.s tested
Water Notices posted

□
⊕
○
△

Fly Proof Latrines erected
Crinals
Incinerators

□
X
┌

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RIGHT CORPS FORWARD AREA, (Centre sub Area) Australian Corps.

Synopsis of work carried out by, and under the supervision of, 5th. Aust. Sanitary Section,
for Month ended May 31st., 1918.

Situation.	Flyproof latrines erected. (seats)	Urinals erected. put down	Incinerators erected.	Ablution benches erected	Grease Traps erected	Billets inspected	Horse lines insp'd	Billets disinfected infected	Wells, pumps, Water points etc. tested.	Notices posted.	Public Conveniences inspected.
Dacours and Rivery	198	37	15	3	31	1382	312	8	314	201	133

WORK IN PROGRESS on 31/5/1918.

Fly-proof latrines. Seats....30.

Grease Traps. 1.

In the Field. 31/5/1918.

W. J. ...
Major
O.C., 5th. Australian Sanitary Section.

Appendix. 26

Appendix H

CHLORINATION OF WATER IN PETROL TINS DIXIES ETC.,

1. The number of scoops per water-cart is made into a thick paste all lumps are broken up and dissolved as far as possible with some of the water to be chlorinated. This is placed in a two gallon petrol tin full of the water to be chlorinated. Thoroughly shaken up this is the stock solution.
2. To chlorinate petrol tins. Add six and two-thirds ozs of the stock solution to each petrol tin to be chlorinated.
3. To chlorinate oval Dixies. (Camp Kettles). Add ten ozs of the stock solution to each dixie to be chlorinated.
4. To chlorinate Rectangular Dixies. Add 20 ozs of the stock solution to each Dixie to be chlorinated.
5. For practical purposes the following tins etc., may be used as measures.
 A 50 cigarette tin (Players, Capstan or Gold Flake) equals 10ozs
 An opened "Bully-Beef" tin equals ten ozs.
 The lid of a man's dixie equals 20 ozs.
 A Macionachae Ration tin equals when full a little more than 20 ozs.



As Unit is essentially a Medical Unit it is endeavoured to keep in view at all times the aims and objects of a Sanitary Section, that is to deal with all matters that are liable to affect the health of any troops in any particular area. This is done by regular inspection of Units in certain areas allotted by Corps or Army by members of the Unit, who report if the necessary measures required are being carried out by the Units. These inspectors also instruct the various units in the various methods required and endeavour to arrange with each Unit for the necessary measures to be carried out. There is also a certain number of Water Inspectors who test and label all wells and water supplies in the area, inspect all sources of supply etc., and report if the necessary measures with regard to Water are being carried out by Units. Reports on the water supply of the area are forwarded to the Corps water supply Officer or to Divisions or Area Commandants as considered necessary.

A Workshop section is also maintained. This section deals with the construction of various Sanitary appliances that may be required. The appliances constructed are then issued out to the Units requiring them in the areas. This section also deals with the making of the various notices required and the posting of them.

The Unit further deals with the following matter. The sanitation of Baths Laundries etc. The Sanitation of Towns. The Disinfection of quarters etc in cases of infectious diseases and seeing that the proper precautions are taken. Dealing with cases of infectious disease amongst civilians in the area and seeing that proper precautions are taken in regard to troops. Advising Units, Area Commandants, Divisions, Brigades etc., in the various Sanitary measures that are required in certain areas and seeing that these are carried out. The supervision and Recommendations for the location of various Sanitary appliances (e.g. Public Manure Dumps, Public Incinerator etc) and recommendations for the construction of same. Investigation of the causes of epidemics in certain areas (e.g. epidemic of Diarrhoea in vicinity of Kemmel in February 1918) which was traced to a well being used as a Public Water Point).

The Sanitary Section in all concerns itself with all matters that do or are liable to affect the health of any troops in its area, in conjunction with the Corps, Division, Brigade or Unit concerned as the case may be.

Constitution of the Sanitary Section.

Establishment provides for 1 Off. 27 O.Rs (including 1 Staff-Sergt, 1 Sergt, 2 Cpls 1 L/Cpl and 2 Motor Drivers) Transport consists of 1 Ford Box Car (750 lbs) and one combination Motor Bicycle and Side Car. At first the transport was 1 three-ton lorry and a Ford Ambulance was usually loaned by the A.D.M.S. of the Division to the O.C. of the Unit. In those days the Unit was Divisional and was able to be mobile and self contained. However on the transfer of Sanitary Sections to Army Areas the three-ton lorry was replaced on establishment by a 10 cwt Box Car. This was however never issued to Sanitary Sections but a 750lb Box Car in its place.

The Unit is divided up into various sections. Although establishment provides for only 27 O.R. at present the Unit has 34 O.R. (2 attached) and can fully occupy all ranks.

The various sections are a. Headquarters. b. Unit Inspectors. c. Water Inspectors. d. Workshops Section.

a. Headquarters. Consisting of 1 Off. 9 O.Rs (1 Staff-Sergt, 1 L/Cpl Quartermaster, 2 M.T. Drivers, 1 Cook, 1 Batman, 2 General Duties 1 Clerk.).

The Staff-Sergt is responsible for the maintenance of discipline etc in the unit, the collection of the reports from the various inspectors or N.C.Os in charge of the inspection of certain areas and for all matters concerning the Unit generally, and co-ordination between the various sub-sections.

The clerk is responsible for all matters in connection with the Orderly Room and the proper filing of all correspondence, the making out of pay sheets etc. The L/Cpl quartermaster is responsible for all matters concerned with the feeding, clothing etc of the unit, the return of Salvage, fat etc, the drawing of the various materials etc required by the workshops section.

The 2 General Duties are the one to assist the quartermaster or the workshops section or as spare inspector as required, the second for the maintenance of cleanliness and the Sanitation of the camp.

The duties of the Officer are many and varied. They consist mainly with dealing with special circumstances or special reports required. The arrangements for various matters in connection with the working of the Unit (material etc). The answering of correspondence. Reports on special matters in the area to the officer or persons concerned. Interviews in regard to the Sanitation of areas with area Commandants, Div A.D.M.S. of Divisions or Brigades. Inspection in detail in an area like the present is impossible, ~~the~~

In areas where there is not much other work and plenty of time, Units are inspected as routine. In the present area it is possible to inspect only those that have been badly reported by inspectors or for some special circumstance, and various units in various areas at certain times.

b. Unit Inspectors.

At present there are 15 (incl. 1 Sergt. 1 L/Sergt. 1 Cpl. and 1 L/Cpl). In the present area, these inspectors are arranged in two posts, one forward post of 1 Sergt, 1 L/Cpl 6 inspectors and 1 Cook), the remainder are at Headquarters.

At one time the various N.C.Os were allotted with a number of inspectors to certain areas. This however tends to decrease the number of inspectors and in big areas like the present the arrangement is that all inspection of the forward post area is carried out under the supervision of the Sergt in charge of the post, all inspection of the rest of the area is carried out under supervision of the Staff-Sergt.

To each inspector is allotted a certain area, this area is in one Army-Sub area only so that the inspector can work in conjunction with the Sub-area commandant's staff of that area. The area is definitely outlined along or between certain roads and each inspector is provided with a map (squared) of his area in order to mark the various units in his area on it and to give the location in his reports. (Map attached). (Inspectors map attached).

Each inspector renders a daily report of the work done by him during the day. These are collected each evening by the N.C.O. supervising the area who makes a covering report on special details noted by him or by the inspectors that he thinks requires special attention. Copies of pro-forma of inspectors report and covering report attached).

Each inspector also keeps a note-book for his own use, and is responsible for having at his disposal any information concerning the area that may be required from him from time to time.

Each inspector in inspecting a Unit reports before doing so to the O/in charge of the Unit, the M.O. the Adj. or if no officers there to the senior N.C.O. present. Inspectors point out the defects to the unit and inform the unit what is required by the Sanitary Section in this regard, and also endeavours to arrange with the unit for the construction of what is necessary or if the Sanitary Section has a supply of what is required on hand instructs the unit to call at the Section to draw the materials required.

Inspectors also report on any nuisances not caused by the military troops, but which is likely to have an influence on the health of surrounding troops. In the case of civilian matters requiring attention, action is taken either through the French Mission or through the area Commandant or Town Major to the Mayor of the place.

The Sanitation of the various sub-areas depends very largely on the intelligence, the methods, the knowledge and the interest in his work of the inspector inspecting the sub-area. Inspectors are instructed in the methods required by the sanitary section from time to time and they instruct the various units and see that they are carried out. A short guide for inspectors has been contemplated for some time but so far it has not been able to carry it out. If it is done later a copy will be attached to the war diary.

The inspectors also report if there is any prevalence of any particular disease in their area. They also carry out the disinfection required in cases of infectious diseases in their areas, under instructions from the Orderly Room. They also notify the workshop section of what is required in their area and arrange through the Staff-Sergt to have them supplied.

c. Water Inspectors.

The water inspectors are all highly trained in their duties and have all been put through a special course of instruction. At present they are three. (1. A/Cpl 2 privates). There are also two inspectors that are trained water inspectors that are not required at the present and are acting as unit inspectors.

These inspectors are detailed to certain areas, where they carry out routine inspection of all sources of water supply in their area, frequently inspect water point, instruct the water-details on water-points in their duties, test water carts, tanks etc and report if the necessary instructions with regard to chlorination are being carried out, report if water points are unpicqueted, post notices on the various sources tested (Attached copy of some of the notices used), report daily on the work done during the day, giving full details of the various sources etc. and marks are on their maps and on the office map of their areas (Attached copy of pro-forma water report and map). They further may be required to give special reports on various water sources that information may be required of.

Each inspector has a Water Testing case, which he carried round with him and uses for the testing of supplies and the information with the respect to labelling. Inspectors have been strongly impressed with the fact that inspection of the surroundings of any water source is of more importance in gauging the purity of the water than can be gauged by the Horrocks test Box. In cases of water supplies with insanitary surroundings, whatever the result of the Horrocks Test, the water is further examined by having a sample taken and sent to the nearest Bacteriological or Hygiene Laboratory, if the water is used to any extent.

Further no running water is labelled by inspectors, as fit for drinking or cooking purposes (as many epidemics of diarrhoea etc were traced to this source in the Kemmel area Nov 1917- March 1918).

The poison testing case is not much used. These were used in testing various wells in captured German territory in the vicinity of the Messines ridge and were also used in testing various wells after the retreat of the Germans beyond Bapaume in the beginning of 1917. No positive tests for poison was found in the Messines Ridge series. In the case of positive tests the procedure would be to label the well and then forward a sample of the water on to the nearest Hygiene Laboratory for examination. This test is liable to the fallacy that the black stain mentioned in the arsenic test is often simulated by a charcoal stain. The arsenic stain is however denser and presents a looking-glass appearance. The arsenic stain is also insoluble in the Hydrochloric acid solution.

Reference the Water Points in an area. In areas where there is a pipe line supply and catchment areas (e.g. Kemmel, Scherpenberg etc) or main supplies from wells etc etc., The main source is usually inspected daily and ~~tea-t~~ samples taken from time to time for bacteriological exam., the tanks are inspected at frequent intervals notices are checked, tanks are tested to see if they have been chlorinated according to instructions and the water picquet is supplied with chlorinating powder if necessary. The instructions issued to each water picquet is attached.

Water inspectors also inspect and test to see if they have been chlorinated water carts and report on the same. They also instruct where necessary the methods required to chlorinate water in small quantities, e.g. in water tins, petrol tins, dixies etc., (Copy of these instructions are attached to the monthly report for this month).

d. Workshop. Section.

This varies according to the area and the amount of work required. At present there are 2 carpenters, 1 plumber, 1 signwriter. The carpenters are increased by having attached several carpenters from brigades in the area requiring a lot of work to be done.

Fourth Army Standing Orders Part 1 para 966 in laying down the duties of a sanitary Section states.

"A Sanitary Section is not responsible for, and is not in a position to carry out, the provision and the erection of the various sanitary appliances that are necessary in an area. Every unit must be able to maintain satisfactory sanitation with improvised appliances until more permanent structures have been supplied."

Para 967. states.

"In order to standardise sanitary appliances and to prevent waste and misuse of R.E. materials, the following instructions will be followed;---

(a) Sanitary officers of areas will control the demands of units for R.E. material for constructing sanitary appliances.

(b). Application for sanitary appliances will be submitted to the O.C. sanitary section of the area. The applications will state ration strength of the unit, and number and description of sanitary appliances already on charge.

(c). The O.C. Sanitary Section will then make out the indent for the necessary stores, which will be issued by the Chief Engineer of the Corps or by the C.E. Army Troops.

(d). The sanitary sections will instruct units in the methods of constructing the appliances.

From these orders it is obvious that sanitary sections were never intended to be responsible for the construction and provision of sanitary appliances in an area, and further their establishment does not provide for any tradesmen. However from a number of sanitary sections that have been seen all have workshops, and some sections confine themselves almost exclusively to workshops, almost three-quarters of the members of the unit being employed as carpenters, plumbers etc.,

In the B.E.F. all O.C. Sanitary Sections are not medical officers and there are quite a number of sanitary engineers as O.Cs. These officers naturally tend to make the workshop portion of their units the larger portion.

Experience has shown that both the paras quoted above will not provide for a very satisfactory sanitation of an area and that the most satisfactory system is one where the inspectors can arrange direct with a unit to have the requirements made or drawn. In these cases the supply will naturally be controlled by the sanitary section. As it is impossible to meet the demands of an area with the made latrine seats that can be drawn from the Engineers, it has been necessary to have workshops at the sanitary sections for the purpose of constructing the necessary requirements that cannot be made at units. ~~That~~

Under the present arrangement if the workshops are maintained up to their requirements it results in a lack of inspectors. As it is considered that this is not advisable the inspectors have been maintained as many as possible and the workshops increased by obtaining carpenters from the various units in the area.

Whilst it is extremely advisable that a Sanitary Section should always have a supply of sanitary material on hand for issue to units, beyond having an expert carpenter it is considered that a workshop of any size should really have not to be maintained as it really interferes with the proper functions of the unit.

Probably the ideal system would be to have in addition to the various Sanitary Sections in a Corps to have also a central Sanitary Workshops section controlled by a sanitary engineer who would be responsible for the making of all sanitary appliances and the issue of these to the various sanitary sections in the corps for issue to units. The Sanitary Sections would then require one expert carpenter two expert sanitary plumbers, who could both be used as plumbers as required or for giving opinions on matters in regard to various sanitary matters that are required from time to time concerning the sanitation of towns, etc. houses etc. At present the greatest difficulty is in obtaining either made sanitary material or material for making these. A certain small supply is drawn from the Corps Dumps and a certain number is made at the Sanitary Section workshop and a certain number is made by units. To save material arrangements have been made with various dumps for the supply of all empty non-returnable boxes, e.g. at the present moment arrangements have been made with the 4th Aust Div., to have all these boxes delivered to the unit, with the S.S.O. 5th Aust Div for keeping them at the dumps until drawn by the unit, and with O/An charge Corps Troops Dumps to retain all non-returnables until called for by the unit, in addition in this area a dump of sanitary material was found at Corbie. This was used for the supply of the forward area and as this is practically now complete and there was a likelihood that the dump may have been destroyed by shell-fire the dump was salvaged from there to Bussy. Material is also drawn from time to time from the C.E. Corps or from C.R.Es of Divisions as may be required from time to time. Particulars of the various plans of sanitary appliances made by this unit have been forwarded from time to time with the war diary or with this units records to the Australian War Records Section.,

General.

The above takes in most of the activities of a Sanitary Section on a broad outline from the sections view. To the War Diary will if possible attached a short account of the relations between an area commandant and the sanitary section.

The above refers mainly to a sanitary section in a forward area and particularly an area like the present where there are practically no civilians.

In back areas where there are civilians the Sanitary Section is responsible that the measures of civilian sanitation are maintained. This when large towns are included in an area takes up a large portion of the units time. The inspection of mineral water establishments, breweries and estaminets are also included in the duties in these areas.

When moving from one place to another and not being located in any one spot for any length of time, the most convenient arrangement is to have I.N.D.O. 4 inspectors and a water-inspector attached to each Brigade, to move with them and to be responsible for the inspection of the brigade and to report ~~to~~ to the Sanitary Section headquarters daily ~~or to the Staff-Captain-of-the-Brigade-if-this-is-not-possible.~~

[Handwritten signature]

.....Major.
O.C. 5th Australian Sanitary Section.

Attached.

- Unit Inspectors Map.
- Pro-forma of Inspectors report.
- Copy of a covering report.
- Fit for Drinking Notice.
- Tested Poisons.
- Unfit for Drinking Notice (~~now available~~).
- Pro-forma water report and map.
- Instructions issued to water picquets,
- Instructions for the chlorination of water in petrol tins etc. (attached to Monthly report for May 1918).

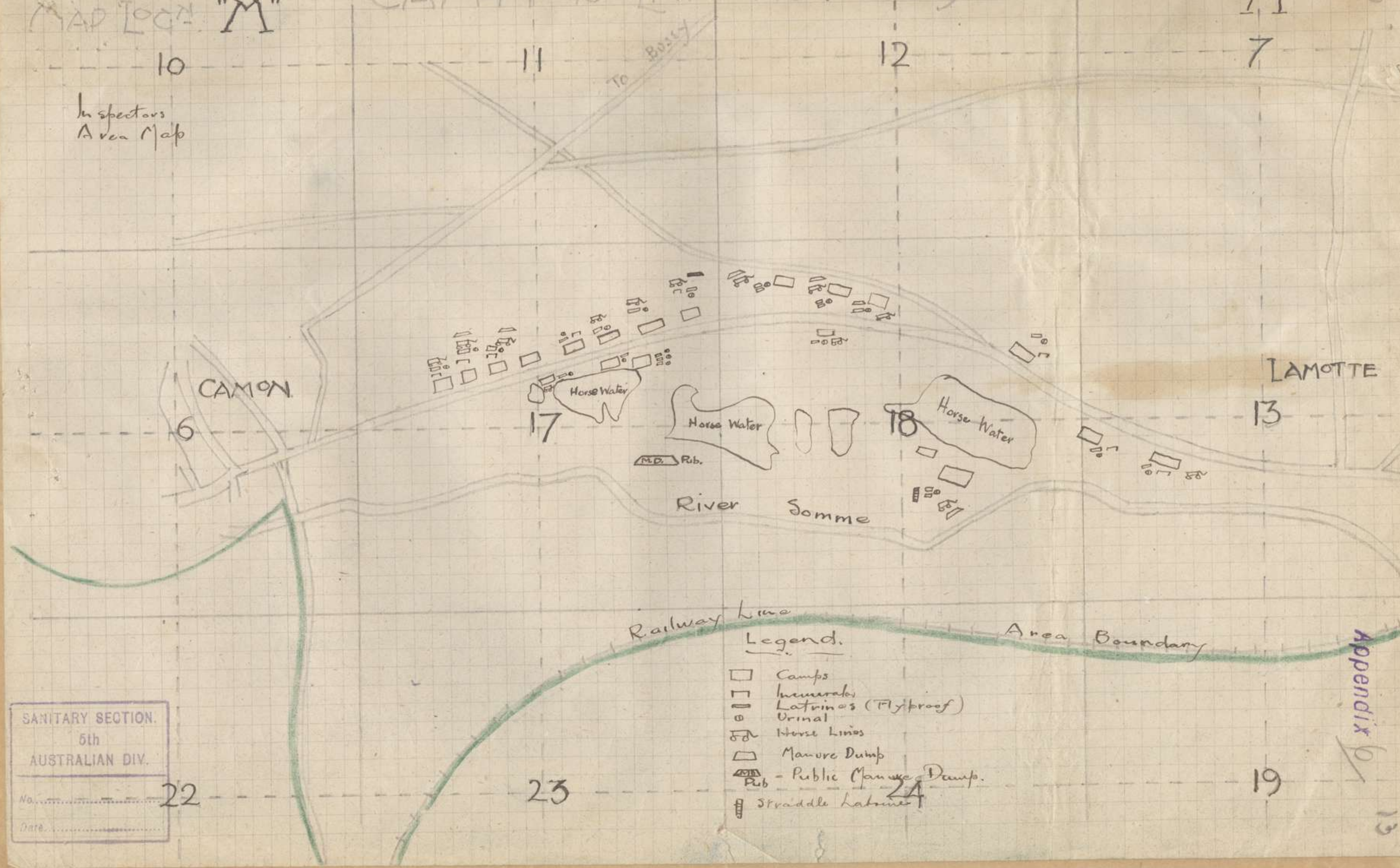
For here see May 1918 diary of San. Sect. 24/5/18

Sheet 62^D
MAP LOG "M"

CAMON TO LAMOTTE ROAD

"N" 220

Inspectors
Area Map



SANITARY SECTION.
5th
AUSTRALIAN DIV.

No. 22

Date

- Legend.
- Camps
 - ▤ Incinerator
 - ▤ Latrines (Flyproof)
 - Urinal
 - ⌘ Horse Lines
 - ▤ Manure Dump
 - ▤ Pub - Public Manure Dump.
 - ▤ Straddle Latrine

Appendix

DAILY SANITARY REPORT .

Inspector.

Area.

Unit and location.	To whom reported	Water.	Latrines.	Urinals.	Incinerator.	G.Trap.	Ablution bench.	Cookhouse & prot. of food	H.Lines.	Improvements.	Remarks.
--------------------	------------------	--------	-----------	----------	--------------	---------	-----------------	---------------------------	----------	---------------	----------

2980

Appendix

H

14

~~M~~

To C.O. 5th Aust Sanitary Section Herewith attached Inspectors reports on Forward Area

Daours.

Improvements.

13th Fld Ambulance 1x6 1x1 box fly proof Latrine 2 Urinals

46th Btn H.Q. Details 1x4 1x5 Do 1 Do

Defects

Hamlet. 4th Fld Coy Engrs using Pole Latrine Promised to erect box seat as soon as possible.

Fouilly Imp. 4th A.I.F. No. 3 1x1 box seat Latrine replacing level Latrine

Hamlet 15th Btn R.A.P. 1x1 box seat Latrine } Pit & pole latrine
Do 15th " H.Q. 1x1 Do } demolished at these billets

La Neuville 11th Div Traffic control 1x1 Do

Etampes 4th " Salvage 1x1 Do

Corbie 15th Bgde Picquet evacuated billet leaving same in an insanitary condition. Town Major has promised to have this billet cleaned.

Bussey. No 18 billet reported left dirty by 11th Pion has been cleaned by Town Major's fatigue

Imp 4th M.G. Details 19 Trap.

4th Div Sigs 1x2 box seat Latrine 19 Trap.

4th M.G. H.Q. 2x1 Do

1x6 Public Latrine at Water Point

Latrine seats & hession is urgently required - this area supply at this post exhausted. Units unable to be supplied with seats are removing same from unoccupied billets & causing a good deal of trouble. Latrine seats tops & timber can still be salvaged at Corbie so transport can be supplied

O.F. Thompson

6/5/18

280

TESTED. DRINKABLE

9

AFTER

CHLORINATION OR BOILING.

.....MEASURES of Bleaching Powder required
per Water Cart for Sterilization.

Date.

Signature.

SANITARY SECTION
5th
AUSTRALIAN DIV.
No.
.....

APPENDIX

9

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10

TESTED. POISONOUS.

Date.

Signature.

Appendix 10

17

UNFIT FOR

DRINKING.

Appendix 11

5TH AUSTRALIAN SANITARY SECTION.

WATER REPORT.

(Wells inspected 24-5-18)

Inspectors Name.

Location of well & number.	Total d depth.	Water Depth.	Diamtr.	Description.	Poss source of pollution	Sediment.	Appearance of Water.	Result of test N.B.P. reqd	Remarks.
L. 30.c.2.1. No 1.	110ft.	15ft.	3ft.	Bricklined cable and windlass situated in farmyard in main road.	Nil.	Nil.	Clear.	1 meas.	No notice posted, Billé No.72.
L. 29.c.6.6. No 2.	80ft	10ft.	6ft.	Bricklined Endless chain and Bucket type by A. Lepaitre, Amiens, good pulley, fitted for power drive situated in farmyard.	See Rmks.	Nil.	Clear.	1 meas.,	No notice posted. Surroundings very insanitary. Bact. test reqd.,
G. 25.d.8.8. No.3.	75ft	18ft	4ft6.	Pulsometer pump down well but not in working order said to be a good source of supply. Situated in factory yard. (Liquarrissace).	Surface overflow	Lot of suspended matter, mostly woody.	Clear with susp. matter.	1 meas.	No N.P.
G. 34.a.0.2. No 4.	82ft.	14ft.	4ft.	Cable and windlass type located in backyard of house	Surface overflow	Slight.	Slightly Cloudy.	1 meas.	Notice. Poste
G. 29.c.7.3. No 5.	100ft	18ft.	4ft6.	Private pumping plant for supply to chateau. Consisting of one electrically driven D.W. Pump, treble ram of French make one 2000 gall. reservoir supplying four taps in yard, and one about 500 galls for house supply. Run by 15th Aust., Field Amb. Pump gives about 340 galls per hour.	Nil.	Nil.	Clear	1 meas.	N.N.P. Very good water.
G. 29.d.0.5. No.6.	128ft.	28ft.	5ft.	Endless chain and bucket system by A. Lepaitre Amiens. Could easily be made adaptable for power drive, situated in yard of "Ferme des Alencons"	Surface Overflow on coping.	Nil.	Clear	1 meas	N.P. Very good water.
M. 6.b.9.1. No.7.	110ft.	15ft.	3ft6.	Windlass and cable type located in farmyard. A great amount of water is drawn by troops in the locality from this well.	Midden Heap & Pool.	Slight	Milky.	1 meas.	Pool requires to be drained Further exam. reqd.

Remarks. All locations on Sheet 62d. Further examination will be made of Nos 2 and 7.

Date. 25-5-18. Rivery and Les Alencons Areas.

The above is a copy of part of a report on various wells in the area forwarded to the Water Patrol Officer Aust Corps in reference to certain wells in the Rivery and Les Alencons areas. This is a similar form to the daily reports rendered by the water inspectors. All wells in villages are tested and a map and report is forwarded to the Water Patrol Officer of the Corps, one to the Area Commandant of the Area and one kept for reference. All villages in the area are dealt with in this manner.

Appendix 13

Insecta

(Folia)

Location	Date	Number	Notes	Other
...
...
...
...
...

DA/1
ASWA
Ants
10.11.50



Appendix 14. 20

Appendix 15.

Appendix 15.

INSTRUCTIONS FOR WATER PICQUET AT

1. Chlorinate the small tanks in use for supply of water for petrol, tins, dixies etc., This should be done each time that the tank is filled. Tanks should be allowed to empty each time before refilling and chlorinating. Each tank will require measures of chlorinating powder on each occasion.
2. Before chlorinating water make the powder into a thick paste with a little water then gradually add more water until the water is dissolved. See that all lumps are broken up before adding the water to dissolve. Do this as shown to you by the water inspector.
3. See that water carts drawing water from the standpipes chlorinate the water before leaving.
4. See that the tanks are invariably left full of chlorinated water before going off duty at night.
5. Keep a record of all carts drawing off the point, and note if the water was chlorinated by the details on the cart. Should the details have ~~you~~ no chlorinating powder you will chlorinate the cart and make a note of it on your report. These reports will be sent or collected by the C.C. Sanitary Section each week
6. Clean out the tanks once a week with chlorinated water at least once a week. This will be done by adding four measures of powder to several feet of water in the bottom of the tank. The tank thoroughly mopped out. All the water run to waste. Fresh water added to the tank again cleaned without adding powder to the water and then the water again run to waste.
7. These instructions will always be carried when on duty.

.....Major.
O.C. 5th Australian Sanitary Section.

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Appendix 16.

D.G.M.S., No. D/N/2288/109/6
D.M.S., Fourth Army No. 188/16.

Appendix 16

D.M.S.,
Fourth Army.

The attached copy of an experiment carried out to test the value of an improvised delouser, which was used by the Russian Army and was stated to be most serviceable in a British Voluntary Unit working with the Russians, is forwarded for your information and such action as you may consider necessary.

As the arrangement apparently destroys lice, it could be applied very readily in almost any locality, and by small units and detachments.

(Sd.) W.G. MACPHERSON, M.C.,
for Director General Medical Services,
British Armies in France.

6/5/18.

2.

For information.
Please construct one of these improvised delousers and report as to its efficiency.

H.Q., Fourth Army,
8/5/18.
To: -Os.C., ALL Sanitary Sections.

L.R. Toswell Capt
for Major-General,
D. M. S.

Appendix. 16

DG/N/2288/109/6.

Director General Medical Services
British Armies in France.

In accordance with your D.G./N/2288/109/6 dated 8.4.18, I have carried out some experiments on the lines suggested. A site consisting of sandy loam was selected and in the ground a chamber 8 feet long, 6 feet wide and 7 feet high was dug. Access to the chamber was by means of a doorway about 2 feet wide and 7 feet high at one end of the chamber. An approach to the entrance was cut in the ground.

The chamber was roofed in with wooden beams and corrugated iron over which a layer of earth was spread.

The doorway of the chamber was closed by a sheet of corrugated iron sliding vertically in grooves cut in the wall at the entrance of the chamber.

Two simple stoves made out of oil drums were placed in the chamber one in each of the far corners with flue pipes leading vertically upwards through the roof to about two feet above the layer of soil on the roof.

The temperature of the air within the chamber was observed by means of a thermometer suspended in the centre of the chamber one foot from the ground. The thermometer was illuminated by means of an electric lamp and the temperature could be read off through a small glass window inserted into the sliding door of the chamber.

For experimental purposes, instead of garments, folded sacks were utilised and the temperatures attained within the folds of the sacks were determined by means of glass tubes containing substances which melted between the following temperatures.

- 51°0 - 53°0.
- 58°0 - 60°0.
- 64°0 - 66°0.
- 68°0 - 70°0.
- 75°0 - 77°0.
- 82°0 - 85°0.

Several experiments were conducted and the following are the details of a typical one.

The fires in the stoves were lighted and a set of temperature recording tubes covered with 4 layers of sacking was suspended in the centre of the chamber midway between the ceiling and floor. Another set of tubes similarly enveloped in sacking was placed 1 foot from the ground near the door and a third set was placed in two folds of sacking against the wall of the chamber. The temperature of the outside air was 12°0. The door was then closed and the rise in temperature of the air within the chamber was observed through the window in the door. The following readings were noted:-

Time in minutes	Temperature
0	20°0
4	60°0
7	70°0
8	75°0
9	80°0
10	85°0
12	88°0
16	90°0
20	92°0
25	93°0
30	93°0

24

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APPENDIX 16

2.

From time to time the fire in the stoves was fed by dropping small pieces of coal down the flues. Sufficient air to maintain combustion entered the chamber through the grooves in which the door slid.

At the end of 30 minutes the door was opened and the sacking with temperature recording tubes was removed. It was found that the temperature ~~was~~ attained within the folds of sacking in the centre of the room and also within the sacking near the door had melted the contents of all the tubes except the highest that is to say had risen to above 77°C., but not so high as 82°C. None of the tubes against the ~~XXXX~~ wall was melted so that the temperature there did not reach 51 - 53°C. This was to be expected as earth walls are damp and cold and readily cool the air in contact with them.

In other experiments in which the tubes were placed in paper envelopes none of them was melted even though they were not wrapped in sacking so that a covering of paper sufficient to prevent their attaining a temperature of 51-53°C. within half an hour notwithstanding the fact that the surrounding air was at a temperature of over 90°C.

A lousy shirt being hung loosely in the chamber was nevertheless disinfested; all the lice were killed.

There is always a certain amount of difficulty and uncertainty in raising articles to the temperature of the surrounding air in a hot air chamber within a short time. This is due to the low specific heat to the articles to raise their temperature quickly. This defect can be counterbalanced to some extent by artificially circulating the hot air by means of a fan but such a device is not admissable in a disinfestator, of this kind whose chief recommendation is simplicity of improvisation.

The conclusions which can be drawn from these experiments are that a chamber of the kind described has certain inherent defects which cannot be overcome by simple means. It may however serve for disinfestation in an emergency if suitable precautions are observed. Clothes should be turned inside out and suspended loosely at a distance from the walls of the chamber with ample air space between each article. Under these conditions the accommodation of the chamber is somewhat curtailed but it might nevertheless be useful in circumstances where a more efficient type of disinfestator cannot be improvised.

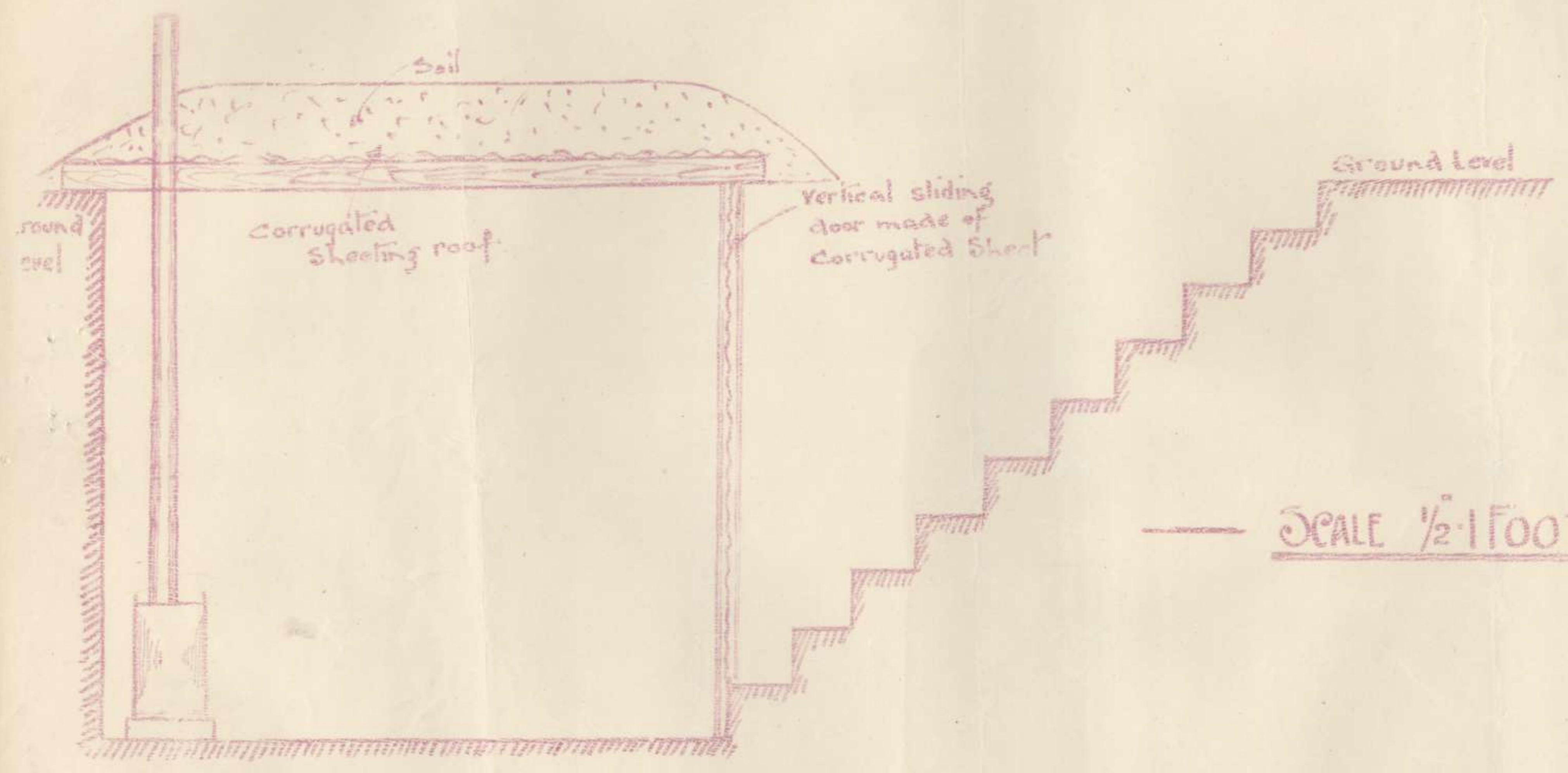
(3d) W.W.O. Beveridge.
Colonel
A.D.M.S. (Sanitation)

H.Q., L. of C.
2nd May, 1918.

Handwritten signature

3000	0
2500	1
2000	2
1500	3
1000	4
500	5
0	6
0	7
0	8
0	9
0	10
0	11
0	12
0	13
0	14
0	15
0	16
0	17
0	18
0	19
0	20

SECTION C-D

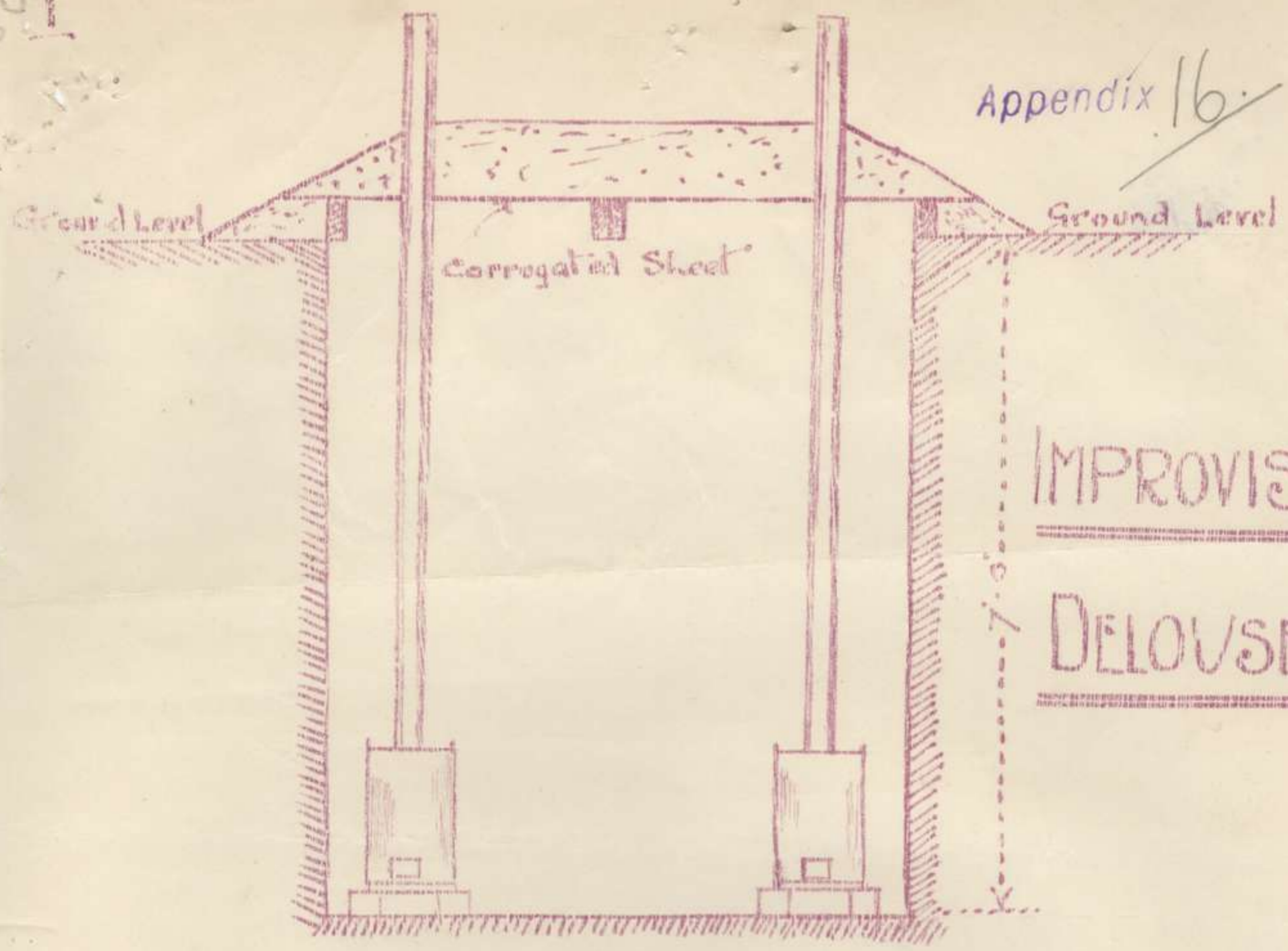


SCALE 1/2" = 1 FOOT

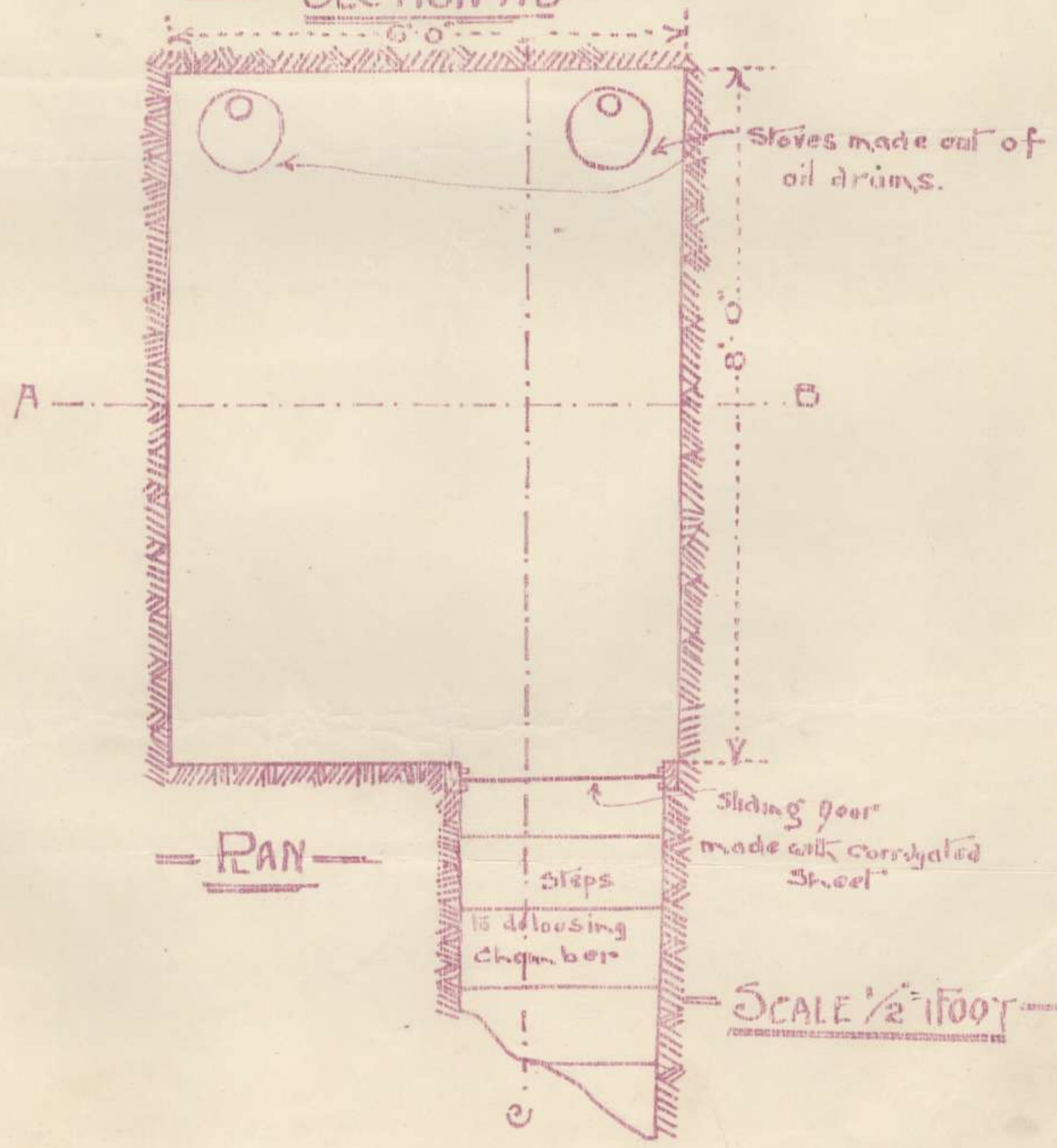
Appendix. 10

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Appendix 16



SECTION A-B



No of Billet or Location	No of well	Depth of well	Description.	Possible source of pollution	Appearance	Result of test	Remark
Rue de Ville No 15.	64	30ft	Bricklined hooded civilian well with windlass rope and bucket. Water 15ft	Surface overflow	Clear	1 meas	Approach
No 15.	65		Civilian pump, covered well	Surface overflow	fine yellow	slight yellow discolor	Good ord
No 8	66	30ft	Civilian well with endless chain and bucket water 10ft. 3ft Coping. Approach unsuitable for water carts.	Nil	Nil	clear	" "
No 1. Rue de Fosses	67		Civilian pump and covered well	Nil	Nil	clear	" "
No 2	68	30ft	Bricklined hooded civilian well windlass rope and bucket	Surface overflow	Nil	"	Approach
Nos 3 & 5	69	30ft	Bricklined civilian well, endless chain and buckets. Water 20ft	" "	Nil	"	"
Nos 6 & 8	70	30ft	Bricklined hooded well windlass rope bucket Water 15ft. Suitable for water carts.	Nil	Nil	"	"
No 13	71		Civilian pump & covered well	Nil	Nil	"	"
No 13	72		" " " "	Surface overflow	Nil	"	"
Nos 18 & 20	73	30ft	Bricklined hooded well windlass rope bucket water 15ft.	Surface overflow	fine white sedim	slightly discolor.	"
No 17	74	40ft	Bricklined well with rope and bucket also pump receiving supply from side shaft of well water 15ft. Bad approach to well	Surface overflow	Nil	clear	"
Rue de L'Egument No 10	76		Civilian pump sealed well. Approach unsuitable	Nil	Nil	clear	"
No 16	75	30ft	Bricklined well windlass rope bucket. Water 10ft. Approach unsuitable for carts	Nil	Nil	"	"
No 7	77		Civilian pump and sealed well	Nil	Nil	"	Good app
No 20	78		" " " " in kitchen	Nil	Nil	"	"
Rue de l'Eglise No 1	79		Civilian pump and sealed well	Surface overflow	Nil	"	Bad app
No 9	80		" " " " " "	Nil	Nil	"	Good
No 12	81		" " " " " "	Nil	Nil	"	"
No 11	82		" " " " " "	Surface overflow	fine yellow	"	Bad
No 14	83	30ft	Bricklined civilian well with windlass rope and bucket. Diam 4ft6. Depth of water 15ft.	Surface overflow	Nil	clear	"
No 15	84		Pump and sealed well	Nil	Nil	"	"
Rue de la cure No 1	85		" " " " " "	Surface overflow	Nil	"	"
No 3.	86	30ft	Bricklined well overhead pulley, block rope and bucket. Water 15ft. Diam., 4ft	Nil	Nil	"	No
No 13	87	30ft	Bricklined well windlass rope and basket Water 15ft. Diam 4ft	Nil	Nil	"	No
No 15	88		Pump and sealed well	Surface overflow	Nil	"	Bad
No 23	89	30ft	Bricklined well, windlass rope bucket water 15ft. Diameter of well 4ft 3.	Nil	Nil	"	"

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Appendix 1

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5th. Australian Sanitary Section CANTEEN.

Balance Sheet..... to 31/5/1918.

18

Liabilities	Fcs.	Cts.	Assets	Fcs.	Cts.
Unpaid Bills	Cash in Hand, o/c 114fr. Petty 35-30	149	30
			Section Debts	47	95
Balance	207	50	Stock in Hand	10	25
Total	207	50	Total	207	50

audited and found correct;

~~W. J. Brown~~ Major.
~~W. J. Brown~~ S/Sgt.

O. F. Thompson Sgt.
 Kelsworth Pte.

Appendix 18

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5th. Australian Sanitary Section CANTEEN.
Cash Statement for month ended.. 31/5/1918.

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Receipts.					Payments.				
Date	From whom	On what a/c.	Frcs.	Cts.	Date	To whom	On what a/c.	Frcs.	Cts.
	Bt. Fwd.	from last return.	46	20	...	NIL	
1/5/18 to 31/5/18	Takings [Payments of Section Debt]		103	10					
					31/5/18	Cash in Hand.		149	30
		TOTAL	149	30		TOTAL		149	30

Audited and found correct... *W. Phillips* Major.

... *O. J. Thompson* Sgt.

SANITARY SECTION. 5th AUSTRALIAN DIV. No. Date.
... *W. Phillips* S/Sgt.

... *W. Lewis* Pte.

Appendix. 181

5th. Australian Sanitary Section

Regimental Funds Cash Statement.....for month ended 31/5/1918.

Receipts.					Expenditure.				
Date	From whom	Amount			Date.	To whom	Amount		
		Fres.	£	s			d	Fres.	£
1/5/18	Cash in Hand								
	Bt Fwd.....	58-10	2	2	7	31/5/18	To cook for		
	Balance Et. Fwd.....	130	9	2		fat.....	9-00	-	6
						Cash in hand			7
5/5/18	5th. Div. P.M.					Balance	29-10	1	16
	No.34565- Fat.		1	3	1		131	12	3
	Total	133	14	10		Total	133	14	10

SANITARY SECTION,
5th
AUSTRALIAN DIV.
In the Field.
1/6/1918.

W. J. ...
.....Major.
C.O., 5th. Australian Sanitary Section.

Appendix 19.

1918

3/10