

AWM4
**Australian Imperial Force unit war diaries,
1914-18 War**

Medical, Dental & Nursing

Item number: 26/80/14

Title: 5th Australian Sanitary Section

September 1918



AWM4-26/80/14

CONFIDENTIAL.

ORIGINAL.
~~DUPLICATE.~~
TRIPLICATE.

280

Australian Imperial Force.

WAR DIARY

OF

5th Australian Sanitary Section.

FOR

September. 1918

Signature of Officer compiling

Arthur Stoward

Captain.

Signature of Officer Commanding

Arthur Stoward

Captain.

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.)

280

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
			SEPTEMBER.	
Daours	1st		Weather Stormy. Chinese labour being employed for cleaning of Daours. German prisoners for Railway Station at Corbie.	me
	2nd		Fine and Warm. Civilians returning to Corbie and Daours. General inspections etc proceeding	me
	3rd		D.D.M.S. Sanitary Instructions No 2 received adding the Hamelet and Aubigny and Glisy areas to this Units area. Sub-section made at Fouilloy. Preparations made to move to Corbie.	
	4th		Number of men sent to Corbie to prepare and clean billet for the unit.	
Corbie.	5th		Finne Day. Unit moved to Billet 16 Place de la Republique Corbie. Sub-section stationed at Hamelet yesterday. Area Commandants of Fouilloy and Hamelet areas interviewed, and various recommendations made.	
	6th		Fine and warm. Inspections of large number of billets in Corbie.	
	7th		Fine and warm. 2 O.Rs proceeded on leave to Paris. (-Sp- S/Sergt Melville and L/Cpl Liersch) Sergt Melville Thompson withdrawn from Blagny Tronville. Cpl Thomas apptd L/Sergt.	me
	8th		hot and windy. Wire received from D.D.M.S. Aust Corps re removal to forward area, stating to be prepared. Sub-sections recalled from Daours, Blagny Tronville, Fouilloy and Hamelet. 1 O.R. proceeded on leave to U.K.	
	9th		Raining. Sergt and 2 men 23rd Sanitary Section arrive to take over. Instructions Sanitary D.D.M.S. Australian Corps for this Unit to take over the right Divisional area of Aust Corps Area received. Wire received postponing move for twenty-four hours. Accomodation arranged for Unit at St Cren (Sheet 62 c. P.27.a.4.4.). In passing through Peronne a german document was found relating to the testing of water by the germans. This, with translation is appended. This bears out the statement made in the last diary that the German regards all water as bad water unless it is labelled good. The method of testing water is very sound. They have no apparatus that corresponds to our Horrocks Water Test Case, apparently. The German method gives a much more thorough idea of the value of water than can be gained from the Horrocks Test case, which if taken by its results as a comparative test of the dangerous qualities of any two waters, is cannot be relied on. The Horrocks test case gives a qu-comparitive quantitative idea of the amount of organic water matter in any given waters, and water chlorinated in accordance with this test will be sterilised. The Germans apparently do not make use of any sterilising powders or and rely mainly for sterilisation on boiling. In their test it is noticed that a-large great importance is paid to the inspection of the source of water, and it is only in those that are passed on inspection that further tests are carried out. Their idea of a "List of Wells" is also very sound. This list of wells is evidently in tthe charge of an Area Commandant who is permanently in the area, so that all wells tested are recorded and any further tests in the meantime are noted, and the information is always available. This is checked, evidently, by the O.C. of an Ambulance(?-)in the area. In our system such a list	A me

WAR DIARY

Army Form C. 2118.

280

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
Corbie.	9th		<p>(continued). of wells is not so kept. This Unit has attempted to put this on a more satisfactory footing some time ago, by adopting making out a comprehensive pro-forma for the wells tested, in any village that the unit took over the wells were systematically tested, a copy of the results, with re marks on each well was forwarded to the D.D.M.S. to be forwarded to the Corps Water Supply Officer, and- a copy file forwarded to the Town Major or Area Commandant of the Area, and a copy filed. This copy was handed over to any Sanitary Section that took over the Area. The pro-forma was adopted by the Corps as the pro-forma to be adopted by all Sanitary Sections in the corps and is fairly complete, though I think that the Remarks column could be widened to allow of for remarks re Bact., and Chem exam of any of the wells to be added. --or else reference numbers could be added. This unit on taking over an area from any sanitary sectn has never received a proper or anything like complete statement of the wells, etc in the area that has been taken over, and has always had to commence all over again to find out for itself and draw up these statements. Were the german method of a list of wells adopted this would be obviated, and Water Supply Officers would have little difficulty in establishing water points in any area. Further wells could be easily checked from time to time and one would be able to have the past history of any water at his disposal.</p>	<p><i>Handwritten notes:</i> 1. <i>Handwritten signature/initials</i> 2. <i>Handwritten signature/initials</i></p>
	10th		<p>Showery with cold wind. Sergt and party proceed to St Cren to prepare camp site at new camp. Unable to obtain lorry to move the rest of Unit.</p>	
	11th		<p>Raining. Rest of Unit less O.C. Orderly Room, Stores and few men proceed to St Cren. 23rd Sanitary Section take over area. In reference to the work done in the Daours and Corbie areas At times as many as 100 men were employed in Corbie. In both areas the Area Commandants made every effort to secure labour and this was then handed over to the Sanitary Section to put to tasks and to supervise. On taking over the village of Corbie the town was in a most delapidated condition. The streets were strewn with debris, refuse and rubbish of all descriptions. The insides of the houses were insanitary and in a very bad state. The town until taking over had been unoccupied and heavily shelled and gassed. In connection with the cleaning up of Corbie one must mention the excellent work done by Capt Scouller, the area Commandant of Corbie for the efforts he made to procure labour for this purpose and to Cpl Thomas of this Unit, who worked indefatigably instructing and supervising units. The streets were first dealt with and then the interhouses of the houses. The Corps Reinforcement Camps gave great assistance in cleaning their billets and in providing labour. At On handing over Corbie, the whole town had changed its appearance, the streets had been cleaned and the town except for the destruction of so many houses once more resumed its old form. On handing over there still remained a good deal to be done with the- some of the unoccupied houses, the majority, however having been dealt with. Towards the last few days a number of civilians had returned.</p>	

D. D. & L., London, E.C.
(A5004) W1 W1771/M2031 750,000 5/17 Sch. 52 Forms/C2118/14

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.)

280

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
St Cren 62c. P.27. c.4.4.	12th		<p>Bain Lorry obtained. Showery. Balance of section proceed to St Cren. Cpl Thomas evacuated to Hospital. L/Cpl Liersch promoted Temp Cpl vice Thomas. Unit in billet shelters-bil tents etc, in location of old german battery position.</p>	me
	13th		Cleaning up and completion of the camp. 2 hostile night bombing machines brought down in flames.	me
	14th		Fine. Some shelling of area slightly forward of camp.. - Un Inspection and water testing commenced. Change of area, lower portion of the area handed over to Sanitary Section attached to 9th Corps.	me
	15th		Instructions received that application for transfer of Major Coppleson from this Unit- to-the and to be transferred to the 8th Feild Ambulance.vice Capt Howard. Capt Howard to take over command of 5th Sanitary Section. (Authority D.A.G.A.I.F.)	me
	16th		Fine. Capt Howard reported. Instructions received from D.D.M.S. that 1 O.R. to proceed from this Unit to the 1st Aust Sanitary Section, Cash and Balance Sheets of Canteen made out on change of command and cash statement of Regimental Funds (Balance\$126-13-2) Copies of these attached.	me B
	17th.		History of Unit completed as far as possible and forwarded under seperate cover. The former pa portion of this history is fairly incomplete, but I am making arrangements that as much be sent in as possible by men who were in the Unit at the time. The second part of this history has not dealt with work done by the unit as with more a record of the unit itself, which I hope to have added to it the acc accounts of seferal of the men, as the record of the work done will be found in the Monthly war diaries, the monthly reports and the unit records and correspondence which is forwarded from time to time to the War Records Section for safe keeping. This history is not quite as satisfactory as I would have liked as it has been done very hurriedly. Major Coppleson reports to A.D.M.S. 5th Aust Div., and to C.O. 8th Feild Amb, but remains with the Unit until completeion of handing over	me
	18th		Capt Howard assumes command. O.C.inspected Baths at Mancourt. Recommendations re establishment of Baths at this site,which had formerly been used for this purpose,were sent to Corps Baths Officer Sundry bombs fell close to camp site. Two enemy night bombing planes brought down. On morning of 18th advance on 3rd & 4th Army fronts,advance being greatest on Australian Corps front. Area was thus increased.	me
	19th		Fine with high wind. Inspection and Water testing in advanced area carried out	me
	20th		Stormy.	me
	21st		Subsection moved to Bernies(sheet 62c Q4c6.6.) in charge of Sgt Thompson. Workshops erected at Headquarters from salved material.	me

D. D. & L., London, E.C.
(A8004) Wt W1771/M2031 750,000 5/17 Sch. 52 Forms/C2118/14

WAR DIARY

Army Form

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.

INTELLIGENCE SUMMARY.

(Erase heading not required.)

2
8

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
St Cren	Sept. 22nd 23rd 24th		Cricket match had been arranged but was abandoned on account of rain. Fine, with cold wind. No. 868 Pte Ashwood M. left to join Australian Furlough Party. Fine. D.D.M.S. Sanitary Instructions No. 6. received, allotting to this Unit the Haut Allaines and "B" Divisional Areas. O.C. inspected new area and found it being administered by Nos 48 and 59 Sanitary Sections. 2 O/Ranks transferred to 2nd Sanitary Section from surplus. Subsection recalled to Headquarters.	Att Att See Appendix "D"
Driencourt.	25th 26th 27th 28th 29th-30th.		Raining and cold. New location chosen at Driencourt. (sheet 62c J3d3.4.) and holding party was sent to this position. Efforts were made without success to secure transport for the move. Headquarters moved to new location and camp site prepared. Small party left at St Cren in charge of some of Units stores. O.C. 48 and 59 Sanitary Sections were interviewed, and under instruction from 3rd Corps were staying in the Area. To avoid overlapping of work the following arrangements were entered into. (1) Where 59th Sanitary Section area overlapped this Units, 59th to be responsible for constructional work, this Unit for inspectional work. (2) Where 48th Sanitary Section area overlapped overlaps, 5th Australian Sanitary Section will pay special attention to sanitation of Australian Corps Troops, also all public constructional work in Driencourt. The existence of this duality of control is however, most unsatisfactory to both parties. The above Arrangements were made to prevent unnecessary overlapping of work, and unpleasantness created for Units in having two separate sanitary inspectors inspecting their camps and issuing recommendations. At the same time, as the area is an Australian Corps Area, O.C. 5th Sanitary Section reserved the right to have a general oversight of the area, and to interfere in sanitary matters if it was considered necessary Subsection under Sgt Thompson moved to near Villers Pancon (E22.). One inspector was sent to Haut Allaines and billeted with Area Commandant. His duty was to inspect Haut Allaines and vicinity and act as sanitary adviser to Area Commandant. Remainder of Unit and stores moved to new location. Raining and cold. Arrangements were made with Area Commandant Haut Allaines that party be detailed for construction of sanitary conveniences in, and general cleaning of, Driencourt. Raining and cold. General routine work proceeding.	Att Att Att Att Att
			<p>Arthur Stoward Captain. O.C. 5th Australian Sanitary Section.....</p>	

7

WAR DIARY

OF

5th Australian Sanitary Section.

FOR

September, 1918. 191

LIST OF APPENDICES.

No.	Subject.
✓ "A"	Monthly Report.
✓ "B"	Routine Orders of Unit.
✓ "C"	Map of St Cren area.
✓ "D"	Map of Haut Allaines and "B" Divisional area
✓ "E"	Translation of German document re water.
✓ "F"	D.M.S. 4th Army Circular and plan of Disinfestor.
"G"	Triuplicate copy of July War Diary.

Arthur Stoward Captain.
O.C. 5th Australian Sanitary Section.

Areas.

----- From 27-8-18 to 5-9-18 Unit was at Dacours. Cleaning up of Dacours and surrounding villages was proceeding, Chinese labour being employed under supervision of this Unit's Inspectors. On 2-9-18 Hamelet, Aubigney, and Glisy areas were added (D.D.M.S. Sanitary Instructions No. 2.) and 2 sub-sections made at Fouilloy and Hamelet. On 5-9-18 Unit moved to Corbie. Inspection of billets in Corbie proceeding. On 8-9-18 warning wire was received from D.D.M.S. Australian Corps re move to forward area. Sub-sections were accordingly recalled from Dacours, Blangy-Trouville, Fouilloy and Hamelet. On 9-9-18 Sergeant and two men from 23rd Sanitary Section arrived to take over the billets, and this Unit received instructions to take over Right Divisional Area. A later wire postponed the move for 24 hours.

On the 10th advance party proceeded to St Gren (Sheet 62c P27 a 4.4.) Headquarters were moved to this location on 12th, Unit being accommodated in tents and shelters in old German battery position. Inspections and Water Testing in new area were commenced. On 14th area was slightly changed, lower portion being handed over to Sanitary Section attached to 9th Corps. On 16th, I reported from 8th Field Ambulance to take command vice Major Coppleson transferred to 8th Field Ambulance. Major Coppleson handed over command of the Section to me on the 16th. During the intervening period he prepared and handed over Cash and Balance Sheets of Canteen and Regimental Funds, and did all in his power to assist me in getting in touch with work in hand, etc. Perhaps it would not be out of place here to acknowledge my indebtedness to Major Coppleson, for the assistance given me in every possible way in taking over command of this Unit.

On the 18th I inspected site of Baths at Hancourt, (Sheet 62c 9.) then being used by 4th Australian Division. Report on these was made to Corps Baths Officer, and recommendations made re establishment of Baths at this site, and installation of Disinfectors. On morning of 18th, forward area was automatically extended by operations on 3rd and 4th Army fronts, and on 19th inspection of this extended area was commenced. Sub-section was moved to Bernies (sheet 62c 9465.8.). Workshop was erected at Headquarters from material salvaged in vicinity. On 24th, Sanitary Instructions No. 6. were received, allotting to this Unit the Haut Allaines and "B" Divisional Areas. New location was chosen at Briencourt (sheet 62c J3d 3.6.), and holding party proceeded to this site on 25th. O's C. 58th and 48th Sanitary Sections were interviewed re the take over.

General.

----- Sanitation.. The work of the Inspectors in the Right Divisional Area (St Gren) has been in some ways a rather thankless task. It was found very difficult to induce Units to undertake any constructional sanitary work, owing to the fact that in the majority of cases, units were only located in a camp site for a matter of 2 or 3 days, or less. Cases of defective sanitary arrangements have invariably been reported by inspectors, and wherever possible, recommendations—mostly in writing—have been made from this Office. Owing to the fact that the area was taken over from the enemy, large accumulations of manure and filth of all kind was found, and flies were numerous. There were also quite a number of dead horses and mules in the area. In standing camps the manure has now been dealt with, but there are still quite a number of unoccupied and staging camps where it has been found impossible to effectively deal with this problem, owing to the non-existence of an Area Commandant or other responsible authority to provide the necessary labour. Arrangements for the burial of dead horses by the nearest unit have been made wherever their presence has been reported by our Inspectors.

Latrines.. The area is now fairly provided with flyproof latrines. Owing to the mobile nature of this unit of late, and consequent inability to secure material, very little constructional work has been done by this unit. Latrine seats, therefore, could not be supplied to units, and inspectors have been instructed to advise units to make their own latrines wherever possible, failing that, indents have been submitted through the usual channels.

Water.. Supply is mainly from wells, usually deep. A number of old water water points exist in the area, some of which could be re-established by the Engineers without much difficulty. Most wells are at present worked by windlass, a few being fitted with ordinary pumps. Recommendation was forwarded to C.R.E. 46th Division re wells at Vraignes. 16 wells have been tested, and 16 water notices erected in this area.

(2)

General..Contd..

Flies.. Flies were very numerous but are now decreasing in numbers, owing largely to measures taken to obliterate their breeding grounds. Inspectors have advocated the use of formalin fly-traps and cresol sprays, with good results.

Food and Cooking.. General condition, fair.

Arthur Howard

Captain.

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

28-9-18.

5 TH AUSTRALIAN SANITARY SECTION.	
No.
Date

Captain A.J. Howard

O.C. 5th Australian Sanitary Section.

27-9-18.

B.

138. Leave-Entry on Warrants. (S.R.O. 4991)

Attention was drawn in S.R.O. 4396, dated 29th June, 1918, and on several previous occasions to the necessity of showing on leave warrants the date of last leave or the date of last embarkation from the United Kingdom.

Warrants are still being issued without this information being given. All ranks are warned that in future anyone who is found attempting to embark with a warrant which is incomplete as regards all particulars will be detained at the Port of Embarkation, and if the information necessary to complete the form cannot be readily obtained the holder of the warrant will be returned to his Unit. All ranks should carefully examine their warrants before leaving their Units, and bring to the notice of the Officer issuing them any omissions or errors.

139. Inoculation-Australian Military Force Regulation 493a is published for information.

(1) Any member of the permanent forces while on war service may be required to undergo such Medical and Dental treatment as may be deemed necessary by a Medical Officer to cure or to remove or to prevent or reduce the likelihood of any disease or infirmity which affects or is likely to affect the efficiency of such member in the carrying out of his duties.

(2) For the purpose of sub-regulation (1) of this regulation, medical treatment shall include vaccination and inoculation, and dental treatment shall include the extraction and filling of teeth.

(Extract from A.I.F. Orders 1369 of 10th September.)

140. Special Payment--Christmas Gifts--(A.I.F. Orders 1378.)

Approval is given for members of the Australian Imperial Force who so desire, and who have sufficient credit in their pay-books, to draw amounts of pay not exceeding a total of Five Pounds (£5) in excess of the prescribed scales for pay issue, for the purpose of purchasing Christmas gifts.

141. Xmas and New Year Cards. (S.R.O. 5033)

Attention is called to the fact that Xmas and New Year Cards must conform to the Censorship Orders. In particular, nothing which would assist the Enemy Intelligence to find out our Order of Battle must appear either in the letterpress or in the illustration, and distinguishing signs of units and formations must not be shown.

No reference must be made to any recent military events or the participation in them by units and formations which has not been referred to in the Official Press Communiqués or the despatches of the Commander in Chief. In cases of doubt, sketches or proofs of proposed cards should be submitted to D.C.P.C., S.R.O.

Struck off Strength.

- 16-9-18. Pte Hutchison, C.A. transferred to 1st Sanitary Section.
- 25-9-18. Pte Gray, C. " " 2nd " "
- 25-9-18. Pte Clarke, W. " " 2nd " "
- 27-9-18. Pte Ashwood, H. returned to Australia on furlough.

5TH AUSTRALIAN SANITARY SECTION.	
No.	
Date	

Administration-- Change in Command.

18-9-18. Captain Howard, A.J. from 8th Field Ambulance, vice Major Coppleson V.M. transferred to 8th Field Ambulance. Authority, D.A.S., A.I.F. 148/01/1918.

Arthur Howard

Captain.

27-9-18.

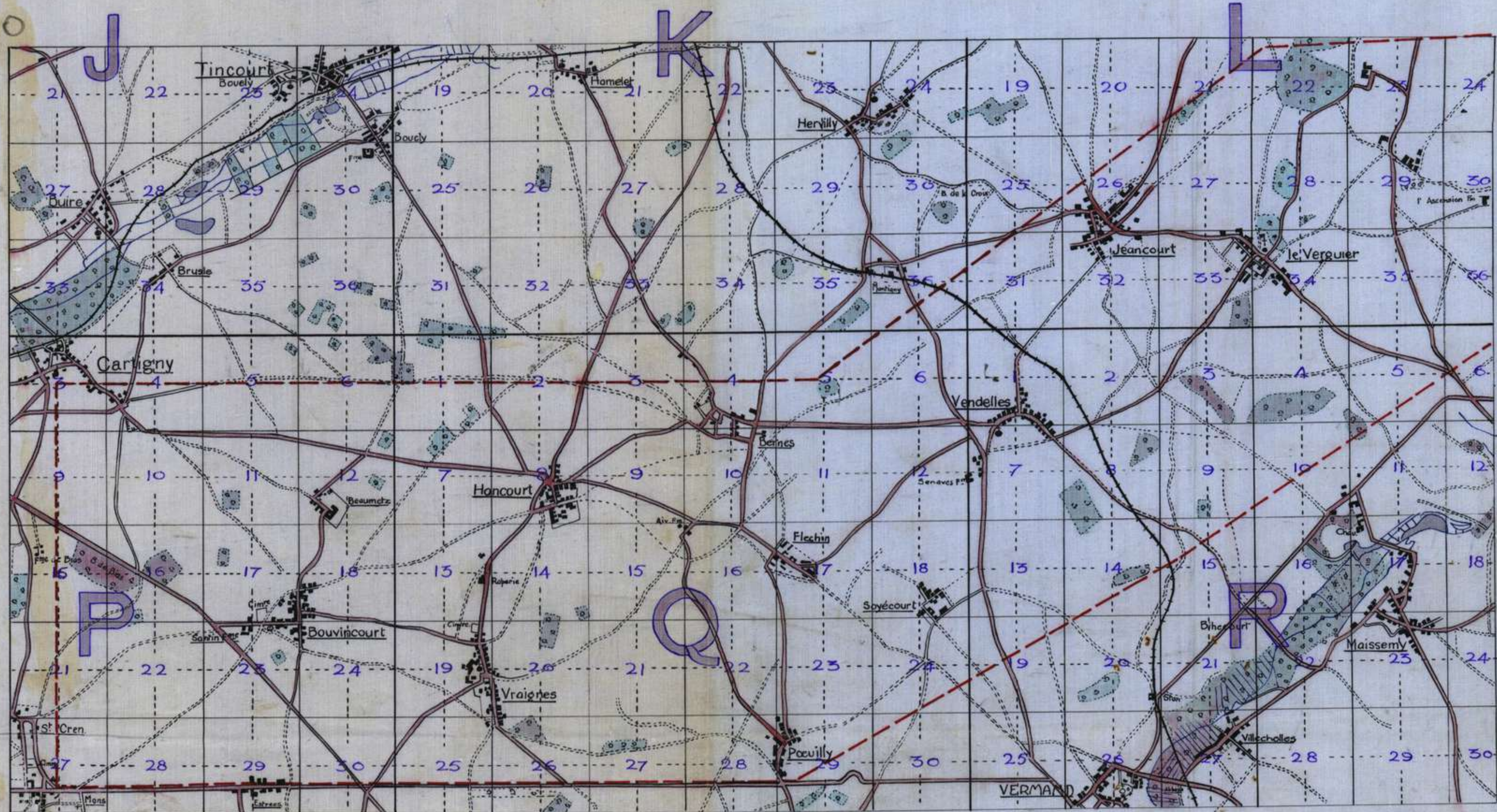
O.C. 5th Australian Sanitary Section....



280

AREA MAP.

C

9



 Railway
 Area Boundary.

Scale 1/40,000

Sheet 62 c.

5th Australian Sanitary Section.

Sept. 1918.

280

280

J

K

L

P

Q

R

VERMAND

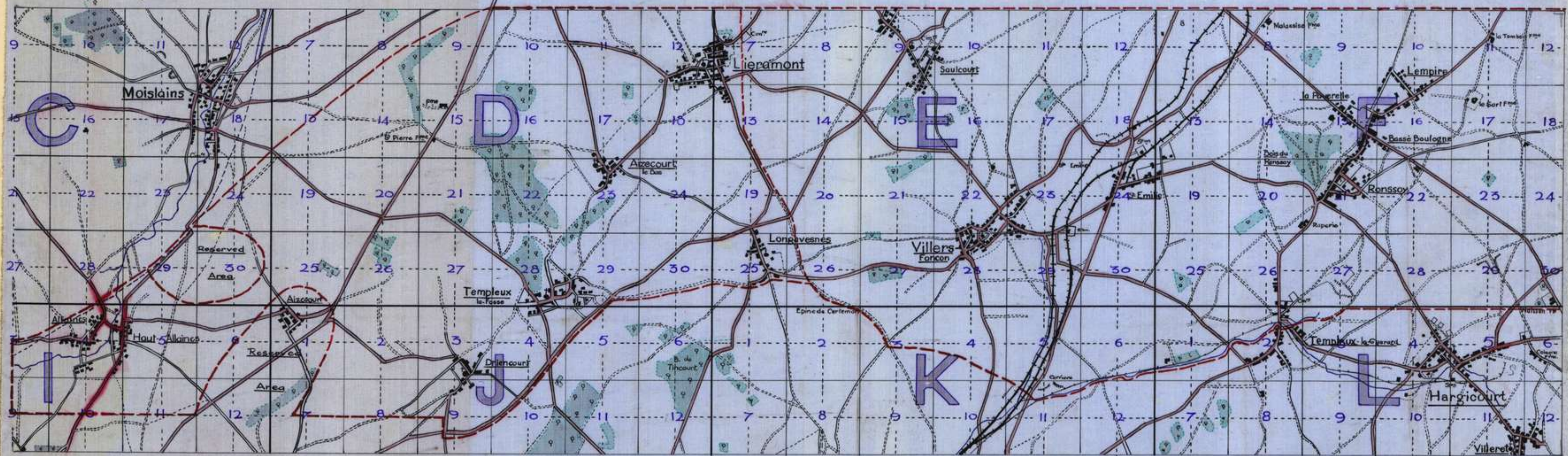
D¹⁰

280

AREA MAP.

D

10



--- Area Boundary
 --- Sub-Area
 --- Railway
 Sheet 62 c.
 Scale 1/40,000.

5th Australian Sanitary Section
 Sept. - October - 1918.

5TH AUSTRALIAN SANITARY SECTION.	
No.	
Date	

Betr.: Brunnenhygiene.

1. Grundsätze für die Brunnenbeurteilung.

Hierzu Kriegs-Sanitaetsordnung Abschnitt E, Teil III.

- a) Zur Beurteilung eines Brunnens ist die eingehende Besichtigung durch den zuständigen Arzt erforderlich.

Zunächst wird für die Brunnenliste vermerkt: Art des Brunnens — (gedeckter oder ungedeckter Schachtbrunnen mit oder ohne Pumpe, Roehrenbrunnen, Zisternenbrunnen usw.) —, Lage des Brunnens — bei Dorfbrunnen Strasse und Hausnummer. — Wenn moeglich: Brunnentiefe, Wasserstand. Eine Wasserprobe wird auf Aussehen, Geruch und Geschmack geprüft und das Ergebnis in die Brunnenliste eingetragen. (Physikalische Wasser-Untersuchung.)

Weiter ist auf Folgendes zu achten:

- b) Der Brunnen muss vor aeusserer Verunreinigung geschützt sein: erhoelter, eine Ueberflutung verhindernder, schützender Schachtrand; vollstaendig dichte Schachtdeckung. Schachtwaeude ohne Schmutzstreifen, Erkennungszeichen verborgener unreiner Zuflüsse! Bei Roehrenbrunnen ist Schutz des Saugrohres sowie des Bohrrohres vor aeusserer Verunreinigung erforderlich. Geregelter Wasserabfluss, erhoelte Lage des Brunnens, gute Wasserrinne. Einwandfreie Umgebung — (keine Jauchegrube, Müllablagungsstaette, Latrinenanlage in naechster Naehel) — Kurzer Eintrag über diese Punkte in die Brunnenliste.
- c) Ist der Brunnen bei dieser Besichtigung als schlecht befunden worden, so darf sein Wasser hoechstens abgekocht genossen werden. Eine bakteriologische und chemische Untersuchung ist in diesem Falle zwecklos und zu unterlassen.
- d) Ist ein Brunnen bei der Ortsbesichtigung als gut befunden worden, so wird chemische und evtl. auch bakteriologische Prüfung als letzte Prüfung vorgenommen. Die chemische Untersuchung führt die chemische Untersuchungsstelle 2 aus. 1 Liter einsenden. Wegen der bakteriologischen Untersuchungen siehe Ziff. 4. Wird das Wasser chemisch beanstandet oder finden sich reichlich Kolibazillen vor, so ist es zunächst nur abgekocht zu geniessen und die Prüfung nach laengerem Abpumpen zu wiederholen. Zur weiteren Beurteilung ist evtl. der beratender Hygieniker hinzuzuziehen. — Eintrag der Untersuchungsergebnisse in die Brunnenliste.
- e) Ist ein Brunnen neu errichtet, oder ein vorhandener Brunnen verbessert worden, so muss, ehe das Wasser zu Trinkzwecken freigegeben wird, eine chemische und bakteriologische Prüfung vorgenommen werden, um etwaige Verunreinigungen beim Bau oder verborgene Schmutzzuflüsse festzustellen. Vor der Wasserentnahme sind solche Brunnen an mehreren Tagen einige Stunden lang abzupumpen. Beurteilung des Ergebnisses wie unter Absatz d.
- f) Ueber jeden Brunnen wird das Urteil des Arztes hinsichtlich der Verwendbarkeit des Wassers zu Trinkzwecken in die Ortsbrunnenliste eingetragen, Datum der Prüfung und Namen des Beurteilenden beigefügt.

2. Behandlung der Brunnen.

- a) Jede Wasserentnahmestelle erhaelt nach abgeschlossener Beurteilung ein Schild «Trinkwasser» oder «Kein Trinkwasser». Ist ein guter Brunnen in einem Anwesen festgestellt, so wird an der Strassenfront des Gehoefes ein entsprechendes Schild angebracht, oder besser noch in der Naehel der Haustuere in haltbarer Schrift auf der Mauer vermerkt: «Hier gutes Trinkwasser!» Auch auf gute Feldbrunnen ist im Gelaende durch Wegweiser «Trinkwasser» → → → hinzuweisen.
- b) Die Truppen müssen belehrt werden, dass lediglich Wasser von Brunnen mit der Bezeichnung «Trinkwasser» ungekocht genossen und zum Waschen der Essgeschirre verwendet werden darf.
- c) Die Schoepfeimer der **Ziehbrunnen**, welche als Trinkwasserbrunnen freigegeben sind, müssen an der Foerderkette angeschmiedet sein und sollen durch besonderen Anstrich kenntlich gemacht werden. Ihre Wegnahme ist, ebenso wie die Verunreinigung von Brunnenschaechten, durch Ortskommandanturbefehl streng zu verbieten. Eine Aufhaengevorrichtung für den Eimer ist an jedem Brunnen erforderlich, ferner ein Baenkchen zum Aufsetzen des Eimers.
- d) Brunnen mit Maengeln sind zu verbessern. Für einfache Reparaturen, wie z. B. das Aufmauern und Zementieren von erhoelten Schachtraendern, oder das Dichten von Schachtdeckungen, oder Herrichten von guten Abflussrinnen bei den Brunnen usw., sind Handwerker der betr. Unterkunft von der Ortskommandantur durch den Kommandanturarzt anzufordern.
- e) Unbenutzte Brunnenkessel sind zu vernageln oder sonst zu verschliessen, um ihre missbraeuchliche Verwendung als Müllgruben usw. zu verhindern.

42

3. Laufende Ueberwachung der Wasserentnahmestellen.

Alle Trink-Wasserentnahmestellen sind monatlich einmal vom zustaendigen Arzt zu besichtigen, etwaige Missstaende sind abzustellen. Besondere Beobachtungen und Brunnenveraenderungen werden in die über jeden Ort zu führenden Brunnenliste eingetragen. — Die Kriegslazarett-Direktoren ueberwachen die Führung der Brunnenlisten und fordern sie von Zeit zu Zeit dazu ein. Eine zweite Ausfertigung jeder Brunnenliste befindet sich beim beratenden Hygieniker.

4. Bakteriologische Wasseruntersuchungen.

Beschleunigter Transport der Proben ins Bakteriologische Laboratorium durch Radfahrer oder als Feldpostsendung («Eilige Heeressache»).

Verfahren im Einzelnen.

a) Die zur Wasseruntersuchung bestimmten Flaschen sind mit einem Bausch entfetteter Watte zu verschliessen; darüber ist eine zweifache Lage entfetteten Mulls zuzubinden. Sie werden danach eine Stunde lang im stroemenden Dampf sterilisiert (Feldsterilisiergeraet).

Die zugehoerigen Korke bzw. Glasstoepsel sind kurz vor der Benutzung 1/4 Stunde lang auszukochen, danach in 1 0/00 Sublimatloesung zu legen.

b) **Entnahme von Wasserproben.**

Kurz vor der Wasserentnahme den Mull entfernen. Watte etwas abbrennen. Beim Füllen ist das Berühren des Flaschenhalses und Eintauchen der Finger in das zu untersuchende Wasser zu vermeiden.

Sobald die Flasche etwa zur Haelfte mit Wasser gefüllt ist, wird der nach obiger Vorschrift behandelte Kork bzw. Gummi- oder Glasstoepsel, nachdem die anhaftende Sublimatloesung mit Wasser des zu untersuchenden Brunnens ab gespült ist, aufgesetzt, und zum Schluss wieder steriler Mull über den Korke pp. gebunden.

c) Sofortige Bezeichnung der Flaschen, auf Begleitschreiben: Tag der Entnahme, Art des Brunnens. Untersuchung auf Kolibazillen erbitten. Absendende Dienststelle angeben.

Flaschen für bakteriologische Wasseruntersuchungen sind von den Feldapotheken der Sanitaetsformationen zu beziehen, welche sie vorraetig zu halten haben. Die Typhus- und Cholera-Impfstoff-Flaschen mit Gummi- oder Glasstoepsel sind hierfür besonders geeignet.

Für die Richtigkeit:

Altgelt
Generaloberarzt.

Kayser
Stabsarzt
stellv. beratender Hygieniker 2.

An die Kriegslazarett direktoren,
Kommandanturaerzte u. Ortsaerzte

1. Regulations for testing of wells.

Supplement to Army Sanitary Orders. Section III. Part 3.

a) A thorough examination by the local Medical Officer is necessary for an opinion on a well.

Firstly is noted for the "list of wells": sort of well (covered or uncovered shaft with or without pumps, artesian well, cistern well and so forth). Position of well - in case of a village well - street and number of house. If possible depth of well - level of water. A water test is to be carried out by the appearance, smell and taste of the water, and the result entered in the list of wells (Physical Water Examination). Further the following are to be taken into account.

b). The well must be protected from external pollution - raised protecting brim for shaft to prevent overflow. Adequate strong covering for shaft: shaft well without stains (steins?) which (?) are signs of hidden pollution: notice to be taken of hidden influx of pollution: in the case of artesian wells protection must be provided against external pollution of the feed pipes, as well as the bore pipes: regulated provision for carrying off surplus water: raised position of well: good water channel: the surrounding ground free from objectional places: no sump holes, no refuse and latrine locations in the vicinity (short entry on these points in the List of Wells).

c) If the well on examination is found to contain unfit water, the water must only be used after being boiled. A bacteriological and chemical analysis is in this case useless and to be dispensed with.

d) If the water in a well is found on local examination to be good, a chemical and eventually also a bacteriological examination as a final test will be taken in hand. The Chemical Laboratory is to be executed by Chemical Laboratory No 2. Send in one litre. With reference to bacteriological examination see para 4.

Should the water be chemically contaminated or should numerous bacilli be found, it must be boiled and the test repeated after continued pumping. For further opinion the advising Sanitary Expert is to be consulted. Particulars of the analysis is to be made in the list of wells.

e). If a well is newly erected or a previously existing well be improved, a chemical and bacteriological examination of the water must take place before it is used for drinking purposes, so that any pollution caused by the building of the well or by hidden influx. Before water is taken out of these wells for drinking purposes, water must be pumped from the wells on several days, for several hours per day.

f). The Medical Officers opinion with reference to the employment of the water of a well for drinking purposes will be taken and entered in the local list of Wells together with date of testing and name of examining Medical Officer.

2. Management of wells.

a) Every water Point from which water may be used will bear after examination of water is concluded, a notice "Drinking Water" or "Not fit for drinking"

If a good well exist in a place a corresponding notice will be fixed on the street, front of the house, or better still near the door of the house in large letters "Good drinking water here". Also in the open country good wells are to be indicated by an indicator thus "Good Drinking Water →"

b) Troops must be instructed that only ~~wells with the~~ water from wells with the notice "Drinking Water" may be consumed unboiled. It ~~may~~ also be employed for the washing of eating utensils. must

c) The buckets of the wells marked "Drinking Water" must be forged to the ends of the chains and should be plainly marked for that use. It must be forbidden by the Area Commandants to take away or foul the buckets. An arrangement for the hanging of the buckets is necessary at every well and also a ledge is required on which to stand the buckets.

d). Wells which are faulty are to be improved. For simple repairs as for example the building and cementing of raised shaft brims or thickening the lids of well covers, or providing a raised channel for the carrying off of surplus water and so forth, trained men are to be demanded from the Town Major by the local Medical Officer. Unused well holes are to be nailed or closed up, so that they may be prevented from being used as refuse pits.

3. Periodical inspection of water points.

All drinking water points are to be inspected by the local Medical Officer once monthly. Everything out of order is to be dealt with. Special observations and alterations to the well will be entered in the local list of wells in each place. The directors of Field Hospitals are to supervise the keeping of the List of Wells and for that purpose to call them in from time to time. A second copy of the list of wells will be found with the Sanitary Officer.

4. Bacteriological Analysis.

Prompt despatch of the samples to the Bacteriological Laboratory by cyclist or D.R.L.S.

me

Detailed proceedings.

a). The bottles ~~to be~~ sent for analysis are to be closed with a pad of degreased cotton wool(? ~~Watte~~ substitute) over which must be bound a double layer of muslin; afterwards they must be sterilised for one hour in steam (Field Sterilising Apparatus). The corks or glass stoppers ~~must~~ employed must be boiled for a quarter of an hour before use and dipped in a one per cent solution of Perchloride of Mercury solution.

b) Shortly before taking the water remove the muslin and slightly burn off the cotton wool (Watte). In filling the bottle one must avoid touching the neck of the bottle and dipping the fingers in the water to be tested. As soon as the bottle is about half full of water the above mentioned cork or stopper & after the sublimate solution has been washed off with water from that which is to be tested) must be inserted and bound with sterilised muslin.

c) A label must immediately be made out, describing the contents of the bottle, date of taking the sample and ~~sort~~ of well from which taken. A request is to be made for testing for Colon Group (Kolibazillen). Name of place of despatch to be given.

Bottles for the Bact., examination of water may be had from the local Chemical Advisor, who has them in stock. Typhus or Cholera lymph flasks are particularly suitable for the purpose.

Seen and approved

Altgelt
Surgeon General

Kayser
Staff Medical Officer.

5TH AUSTRALIAN SANITARY SECTION.	
No.
Date

W. Kayser
W. Kayser

ARMY ROUTINE ORDER NO. 2427 D/20/8/18.L I C E.

(a) One of the principal causes of sick wastage is Trench Fever. It has been proved that lice are the means of conveying this and other diseases, such as typhus and other important fevers affecting troops in the field. Disinfestation must therefore, be regarded as an essential measure of sanitation.

(b) Every endeavour must be made to provide means which will enable troops to disinfest all their clothing at any time when they are found to be lousy. The arrangements made must enable all the men occupying the same billet to be disinfested at the same time, so as to prevent those who have been disinfested from becoming reinfested by contact with men who are still lousy.

(c) At a temperature of 60° Centigrade lice are killed in 4 minutes and their eggs in 20 minutes. The Russian pit, particulars of which, accompanied by plans, are given below, is an effective and simple method by which lice and eggs in clothing can be killed. Temperatures of 100° Centigrade and over can be obtained in these pits.

(d) As material becomes available, one or more disinfesting pits will be provided:-

- i. At every bath-house in the Army Area.
- ii. At the H.Q. of every medical unit.
- iii. At the H.Q. of each Labour company.
- iv. At schools; in Rest areas, and at Reinforcement, Prisoners of War and Field Punishment camps.
- v. By Area Commandants and Town Majors in each village used for billeting troops.

(e) It should be the aim of every unit to have a disinfesting pit; the simplicity of its construction and the small amount of material and labour required should enable even the smallest unit to provide itself with one.

(f) Specimens of these pits may be seen at the H.Q. of Sanitary Sections, and advice as to their management can be obtained from the Os.C. these units, who will supervise the construction of pits made within their areas.

(g) In addition to disinfesting clothing, it is essential that men infested with lice should have the hair of their heads and bodies clipped close, so as to get rid of the eggs which may be attached to the hairs.

(h) Periodical inspections of the men will be made to see that these measures are carried out. (see S.O. 877.)

DISINFESTING CHAMBER (RUSSIAN TYPE)

- (i) The disinfestation is carried out by means of dry heat.
- (j) A chamber is dug in the ground, 8 feet long, 6 feet wide, and 7 feet high.
- (k) The site selected should be as dry as possible.
- (l) Access to the chamber is by means of a doorway, about 2 feet wide and 7 feet high, at one end of the chamber.
- (m) An approach to the entrance is cut in the ground, preferably with steps down to the doorway.
- (n) The chamber is roofed in with wooden beams and corrugated iron and covered with earth. The doorway is closed by a sheet of corrugated iron sliding vertically in grooves cut in the wall at the entrance of the chamber.
- (o) The heat is produced by means of a stove, composed of 2 oil drums placed horizontally on a stand in the chamber and fed from the outside, a separate approach being made for this purpose.

5TH AUSTRALIAN SANITARY SECTION.
No.
Date

F

2.

- (p) Tubes of Naphthalene, with a fixed melting point, have been issued to the Os.C. Sanitary Sections. By means of these tubes the temperature reached within the chambers can be ascertained.
- (q) During the process of disinfection, the outer end of the stove is left open. When the process has been completed, the fire is damped down by closing the door of the stove.
- (r) The clothes to be disinfested are hung loosely from wires passing from side to side of the chamber.
- (s) A temperature sufficient to kill lice can be obtained in from 15 to 30 minutes and clothes should be left in the chamber for at least 30 minutes after this heat has been obtained.
- (t) Clothes should not be hung within 1 foot of the walls, which will always be cooler than the air contained in the chamber.
- (u) As the flues choke very easily, they should be cleaned every day.
- (v) The whole of the work of construction, including digging, can be completed by 4 men in one day.
- (w) Attention is directed to D.G.M.S. Circular memo. No. 16 dated 23rd. July, 1916 (S.S. 455) "Preventive Measures against lice."
- (x) The importance of regular baths, accompanied by a clean change of underclothing and the ironing of uniforms, cannot be emphasized too strongly. Increased bathing facilities should be established under Divisional arrangements, and should include facilities for ironing.

L. R. Toss will Maj

fr

Major-General,
D. M. S.

H.Q., Fourth Army,
21/9/18.
G.

To: - Labour Commandant (100 copies),
D.Ds. M.S., Corps for distribution.
ALL Army Units.

DISINFESTING CHAMBER (RUSSIAN TYPE)

The disinfection is carried out by means of dry heat. A chamber is dug in the ground, 8 feet long, 3 feet wide and 7 feet high.

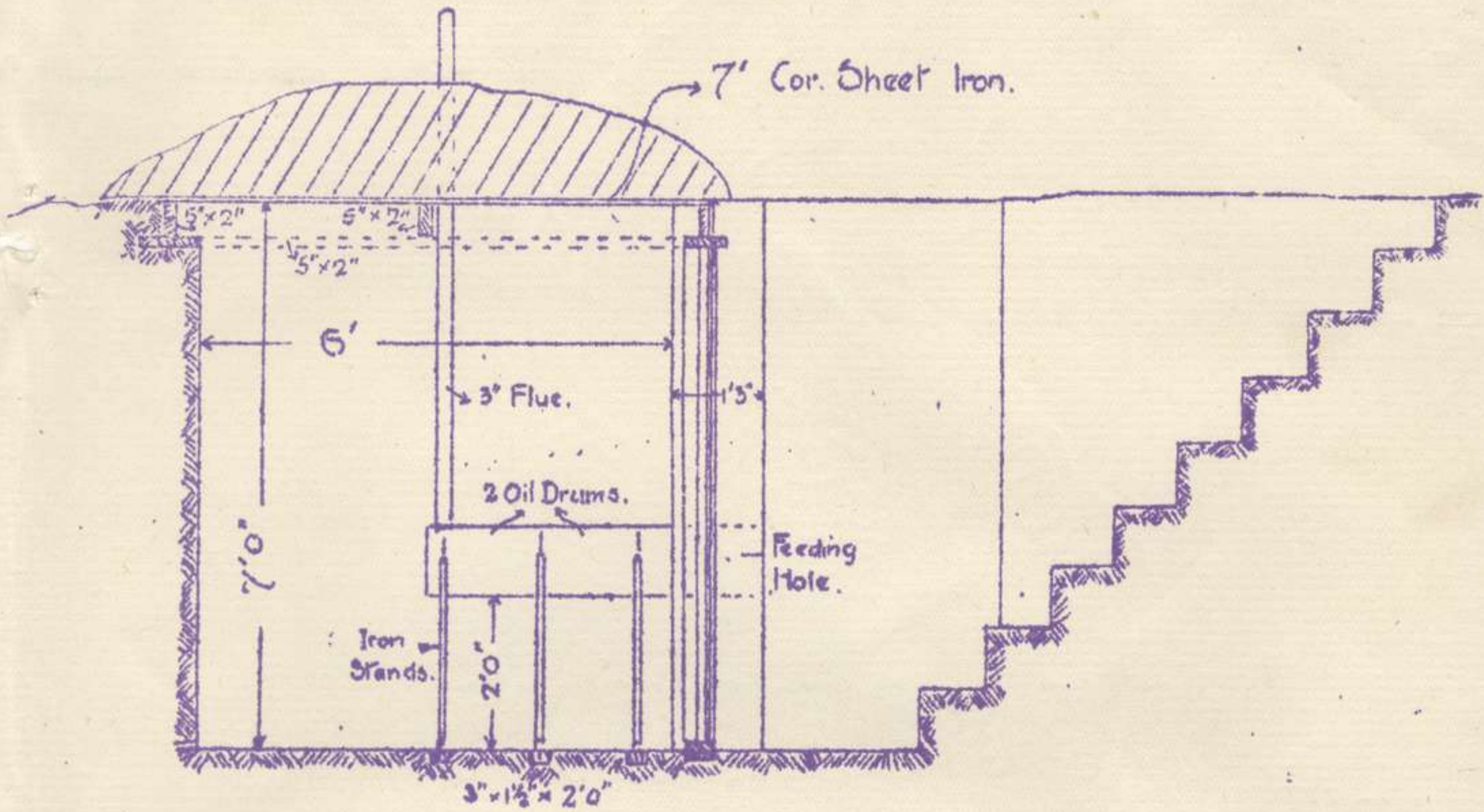
The air selected should be as dry as possible. Before the chamber is dug, it is covered with a layer of earth, 1 foot thick, all over the chamber.

An opening to the entrance is dug in the ground, leading with steps down to the doorway.

The chamber is filled in with water, steam and covered with earth. The doorway is closed by a board of corrugated iron sliding vertically in grooves cut in the wall at the entrance of the chamber.

The heat is produced by means of a stove, composed of bricks placed horizontally on a bed in the chamber and fed from the outside, a separate approach being made for this purpose.

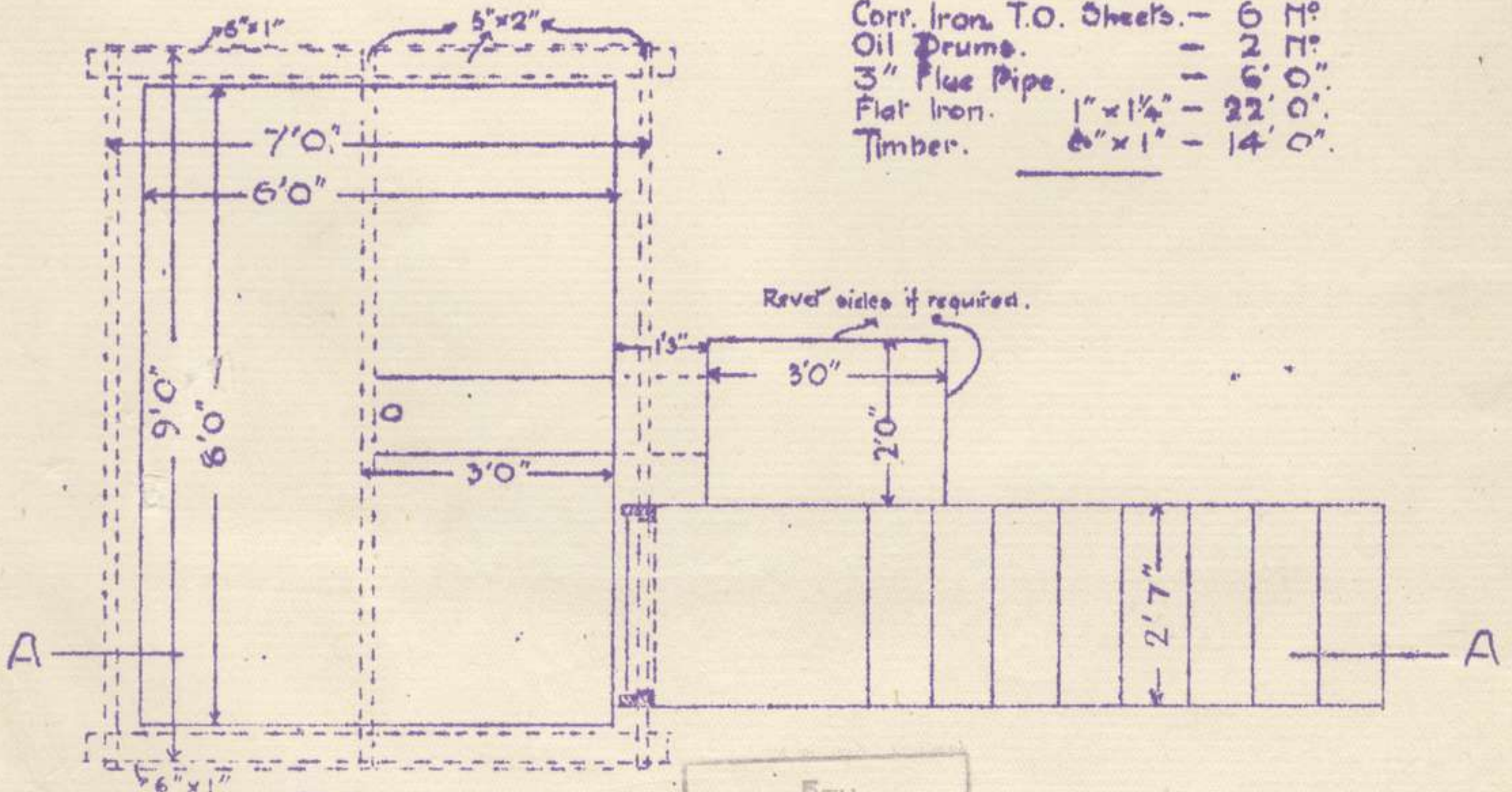
DELOUSING CHAMBER.



SECTION A-A.

Materials Required.

Timber.	-	5" x 2"	-	60'	0"
"	-	3" x 1 1/2"	-	6'	0"
"	-	3" x 1"	-	13'	0"
"	-	1 1/2" x 1"	-	13'	0"
Corr. Iron T.O. Sheets.	-		-	6'	7"
Oil Drums.	-		-	2'	7"
3" Flue Pipe.	-		-	6'	0"
Flat Iron.	1" x 1 1/4"	-		22'	0"
Timber.	6" x 1"	-		14'	0"



PLAN.

5TH AUSTRALIAN SANITARY SECTION.

No. _____

Date _____