

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

Tunnelling & Survey

Item number: 16/4/34 Part 2

Title: 3rd Australian Tunnelling Company

November 1918



AWM4-16/4/34PART2

256

Appendix 64

"C" FORM. Army Form C. 2123 (In books of 100.) MESSAGES AND SIGNALS. No. of Message.....

Prefix 9m Code Words 34 Sent, or sent out. 1 Stamp

Received from 700 By 1st At m.

Service Instructions

To By Office 2215 m. Received 2215 m.

Handed in at ACO



TO 3rd Coy Australian
Beloeil

* Sender's Number. 698 Day of Month. 13 In reply to Number. AAA

BE in subject
not stop bullet
placed at base
the grooves provided for
them at locks no 1
ANTONING, and locks could
been checked fully and
relieved when done and
matter urgent

FROM PHO 10010

PLACE & TIME

* This line, except AAA, should be erased, if not required
W.C.W.54/P.7.3 691,000 Pads 2/18 A.P.Ltd (R3013)

APPENDIX 64



APPENDIX 64

64

"A"

Army Form C. 2121
(in pads of 100.)

MESSAGES AND SIGNALS.

No. of Message

| | | | | | |
|--|------------|-----------|---------|---|-------------------|
| Prefix | Code | Words. | Charge. | This message is on a/c of: | Recd. at m. |
| Office of Origin and Service Instructions. | | Sent | | |Service. | Date ..... |
| Wire | | At.....m. | | From | |
| To | | By | | (Signature of "Franking Officer.") By | |

TO } C.R.C. I Corps Troops

| | | | |
|------------------|---------------|---------------------|-----|
| Sender's Number. | Day of Month. | In reply to Number. | AAA |
| * 2327 | 14 | 693 | |

Stop banks have been placed in grooves provided for them at lock Hai ANTOING and gates on South end fully opened also half gate on North end fully opened other half broken and ~~and~~ obtaining gear and tackle to fully open broken half gate and will complete tomorrow

| | |
|--|--------------------|
| From | 3rd Aust Inm. Coy. |
| Place | |
| Time | |
| The above may be forwarded as now corrected. (Z) | |
| Censor. | W. Anderson |
| Signature of Addressor or person authorised to telegraph in his name | |

* This line should be erased if not required.

"A" Form
MESSAGES AND SIGNALS.

Army Form C. 2121
(in pads of 100.)

No. of Message

| | | | |
|--|------------|------------------------------------|--------------|
| Prefix | Code | Words | Charge |
| Office of Origin and Service Instructions. | | This message is on a/c of . | |
| Sent | | Recd. at m. | |
| At m. | | Date 64 | |
| To | | From | |
| By | | (Signature of "Franking Officer.") | |

TO {

| | | | |
|------------------|---------------|---------------------|-----|
| Sender's Number. | Day of Month. | In reply to Number. | AAA |
|------------------|---------------|---------------------|-----|

of the water above the
lock gates. Men will
have to bring the
timber from one of
the dumps - Probably
from the dump near
the Canal at Maunle
if there are no banks closer.
The top banks will have
to be wedged to keep the
lot down.

I am sending a party
down tomorrow with the
tools you asked for. In
the meantime please carry
on getting the timber - Use
the borry which delivers

From This if necessary. This
Place being on the canal following
Time will afterwards return

The above may be forwarded as now corrected. (Z)

"A" Form
MESSAGES AND SIGNALS.

64
Army Form C. 2121
(in pads of 100.)

No. of Message

| | | | |
|--|------------|------------------------------------|--------------|
| Prefix | Code | Words | Charge |
| Office of Origin and Service Instructions. | | This message is on a/c of . | |
| Sent | | Recd. at m. | |
| At m. | | Date | |
| To | | From | |
| By | | (Signature of "Franking Officer.") | |

TO {

| | | | |
|------------------|---------------|---------------------|-----|
| Sender's Number. | Day of Month. | In reply to Number. | AAA |
|------------------|---------------|---------------------|-----|

Following wire has been
received:-
"B. in C. instructs that stop
Baulks be placed at once
in the grooves provided for
them at Locks No. 1 ANTOING
and lock gates then
opened fully. Report
when done. Report
very urgent"

I take it that this refers to
the main locks near the
new bridge at Antoin and
that the baulks will have
to be put in to the height

From
Place
Time

The above may be forwarded as now corrected. (Z)

Censor. Signature of Addressor or person authorised to telegraph in his name.

APPENDIX 64



356

"A" Form
MESSAGES AND SIGNALS.

Army Form C. 2121
(in pads of 100.)

No. of Message 64

| | | | | | |
|--|------------|----------|---------|------------------------------------|----------------|
| Prefix | Code | Words. | Charge. | This message is on a/c of : | Recd. at |
| Office of Origin and Service Instructions. | | Sent | | | Service. | Date ..... |
| ..... |  | At | | From | |
| ..... |  | To | | By | |
| ..... |  | By | | (Signature of "Franking Officer.") | |

| | | | |
|----|-------|-------|-------|
| TO | ..... | 3 | ..... |
| | | | |

| | | | |
|------------------|---------------|---------------------|-----|
| Sender's Number. | Day of Month. | In reply to Number. | AAA |
|------------------|---------------|---------------------|-----|

*
to these Headquarters with
the rations dumping the
rations for the Peribely Bridge
party en route. Tell Supt.
Butcher that there are
2 Officers and 130 men at the
Peribely Bridge -

The lorry carrying the
tools should reach you
before noon tomorrow

13/11/18
W. Sanderson
C.O. 3rd Aust. Inf. Coy.

| | |
|-------|-------|
| From | ..... |
| Place | ..... |
| Time | ..... |

The above may be forwarded as now corrected. (Z)

Censor. Signature of Addressor or person authorised to telegraph in his name

* This line should be erased if not required.

APPENDIX 65

Appendix 65

"A" Form
MESSAGES AND SIGNALS.

Army Form C. 2121
(in pads of 100.)

| | | | | |
|--|------------|----------------------------|---------|------------------------------------|
| Prefix | Code | Words. | Charge. | No. of Message |
| Office of Origin and Service Instructions. | | This message is on a/c of. | | Recd. at |
| | | Sent | | Date |
| | | At | | From |
| | | To | | By |
| | | By | | (Signature of "Franking Officer.") |

TO } *Capt. McDrell*

| | | | |
|------------------|---------------|---------------------|-----|
| Sender's Number. | Day of Month. | In reply to Number. | AAA |
|------------------|---------------|---------------------|-----|

*
Please let me have
daily reports of progress
of work on the Canal.
Send them by return
of Ration Lorry.
After the pontolls are
fixed at Antong and
the lock gates fully opened
the following work ~~is to~~ be
undertaken.
Remove Coffin dam at
D 26 a 30.20 but leave
the subsidiary dam of
timber pontolls for controlling
flow.
Repair all breaches in Canal
Banks

| | |
|-------|--|
| From | |
| Place | |

65

"A" Form
MESSAGES AND SIGNALS.

Army Form C. 2121
(in pads of 100.)

No. of Message

356

| | | | | | |
|--|--------------|-----------|---------|------------------------------------|-------------------|
| Prefix | Code .....m. | Words. | Charge. | This message is on a/c of . | Recd. at m. |
| Office of Origin and Service Instructions. | | Sent | | |Service. | Date ..... |
| ..... |  | At.....m. | | From | |
| ..... |  | To | | By | |
| ..... |  | By | | (Signature of "Franking Officer.") | |

| | | | |
|----|--|-----|--|
| TO | | (2) | |
| | | | |

| | | | |
|------------------|---------------|---------------------|-----|
| Sender's Number. | Day of Month. | In reply to Number. | AAA |
|------------------|---------------|---------------------|-----|

*
 Clear away the dams behind
 the sluices at 12 & 50. 60
 so that the flow of the
 river can be controlled
 by operating the sluice gates
 Advise me regularly as to
 progress of work. Please.

14/11/18
 W. Sanderson
 Major
 CO. 3rd Aust. Inf. Bn.

APPENDIX
65



Appendix 66

C.R.I. Corps Troops

Reference your enquiry

The 60' span sent up
is either for 'through'
a Deck bridge.

Enclosed a list of
the stores required for the
factory in substitution of
28 Tee Stents J.

| |
|---------------------|
| C.R.I. Corps Troops |
| 1075/26/1 |

To O.C.

3rd Australian Tunnelling Coy.

Passed to you in answer
to your enquiry

14.11.15

W.D. Clouston
Capt. Royal
RE Tunnelling Coy

DECK BRIDGE. - For a Deck Bridge, substitute for
28 Tee Struts J the following:-

| | | | |
|---|-----|--|----|
| 2 | | 20 P.P.Handrails..... | 1 |
| | | 24 P.P.Handrails standards and Bases..... | 24 |
| | | 48 P.P.Handrail standard struts..... | 1 |
| | X | 16 Angle Bracings..... | 4 |
| | Y | 16 Angle Cleats, Boxes.... | 1 |
| | Yl. | 16 Angle Cleats, Boxes.... | 1 |

Appendix 66

DECK BRIDGE. - For a Deck Bridge, substitute for
28 Tee Struts J the following:-

| | | | | |
|---|-----|--|----|-----|
| 2 | | 20 P.P.Handrails..... | 1 | 356 |
| | | 24 P.P.Handrails standards and Bases..... | 24 | |
| | | 48 P.P.Handrail standard struts..... | 1 | |
| | X | 16 Angle Bracings..... | 4 | |
| | Y | 16 Angle Cleats, Boxes.... | 1 | |
| | Yl. | 16 Angle Cleats, Boxes.... | 1 | |

APPENDIX

66

File
256

Appendix 67

O.C., 135 A.T.Coy. R.E.
230 A.T.Coy. R.E.
337 R.C.Coy. R.E.
3rd Australian (T) Coy. ✓

| |
|-----------------|
| C.R.E. |
| I CORPS TROOPS. |
| No 1133 |

Please wire immediately your requirements for
(a) Footballs complete and (b) football bladders, both
on repayment, required for recreation for troops.

Wires should be forwarded to reach this office
not later than 5.p.m. 15.11.18.

✓

H.S. Clouston

Capt. & Adjutant,
R.E., I Corps Troops.

14.11.18.

~~135
230
337
c.~~

The Co.

Appendix 68

3rd Aust. Gun Coy

Sir

In reference to Lock No 1
 Antoirig, Timber baulks have
 been put in above & below the
 lock gates up to water level
 & the gates opened. The right
 hand gate on North end of lock is
 broken & cannot be opened without
 strong tackle, eg a crab winch
 or derrick & block blocks
 The lock is at present as per
 sketch



Yours Obediently Capt

Chief Engineer, I Corps.
Chief Engineer, III Corps.
Chief Engineer, XI Corps.

With reference to orders being issued by Fifth Army to your Corps - clearance of the ESCAUT is to be put in hand on the following lines :-

(a) General.

Clearance of all waterways except that lattices steel girders lying in the canal need not be removed.

(b) Barrages.

Where sluices exist in the diversion channel they are to be got into working order, but left open or closed as found. Where demolished, cross beams are to be let into grooves and the channel cleared.

Where masonry piers, whether in the river or in a diversion channel existed, the debris is to be cleared and beams put into position up to water level.

(c) Locks.

When the gates are intact they are to be opened full as soon as cross beams have been put in position in grooves provided for that purpose, up to water level.

When the gates are destroyed, cross beams are to be put in up to water level and the demolished gates and debris are to be cleared from the lock chamber.

(d) Dams.

These are to be blown or removed to full width and depth as soon as the next downstream lock or barrage has been got under control as above described.

(e) Breaches.

These are to be closed, but this may be delayed if an inundation can be drained back through it.

2. Daily progress reports are to be sent in under heads (a) to (e).

3. Lieut. FARRER of the I.W.T. will give any technical advice required. He is establishing his H.Q. at PROYENNES - 37/0.14.b.central.

A Det. 196 Land Drainage Coy. will be working directly under his direction.

Headquarters.
Fifth Army.
14th November, 1918.
Copy to Lieut. FARRER.

Sgd., H. BULKELEY,
Major R.E.,
for, Major General,
Chief Engineer, Fifth Army.

2.

O.C., 3rd Australian (T) Coy.

For information and action.



H. Clouston

Capt. & Adjutant,
R.E., I Corps Troops.

15.11.18.

Appendix 70

3rd Australian Tunnelling Co.

16th Div. No. G. 30/17. 16th Oct. 1918.

In a cellar marked "DANGEROUS" at CITE DE DOUVRIN there are four large iron barrels from which smoke smelling like sulphur and phosphorous fumes is escaping.

Can arrangements be made for these to be destroyed please.

W. E. H. Mann
du Major,
General Staff 16th Division.

Copy to D. G. O.

6

APPENDIX
70

*File*SECRET.46th Inf. Bde. No. S.C/5/40.

O.C.

1/9th Royal Scots.
 7/8th K.O. Sco. Bde.
 10th Sco. Rif.
 46th T.M. Battery.
 3rd Australian Tunnelling Coy.
 44th Inf. Bde.
 45th Inf. Bde.

H.Q. 15th Divl. Arty.
 C.R.E. 15th Division.
 15th Bn. M.G. Corps.
 H.Q. 15th Division.

In accordance with 15th Division No. A/5/520 dated 17/11/18, a Court of Enquiry, composed as under will assemble at 10.00 hours on 19th November, 1918 at Headquarters 46th Infantry Brigade, Chateau ARBRE, to enquire into and take evidence regarding damage done to civilian property at the following places, and to record an opinion as to what troops are responsible for the damage :-

- (a) HOLLAIN.
- (b) WEZ VELVAIN.
- (c) Chateau De LANNOY.

Proceedings of Court of Enquiry in each of the above cases to be recorded on separate forms and separate evidence to be taken regarding each of the above places.

PRESIDENT.

Brigadier General V.M. FORTUNE, D.S.O. Commanding 46th Infantry Brigade.

MEMBERS.

A Lieut-Colonel to be detailed by Brigadier General Comdg. 44th Inf. Bde.
 A Lieut-Colonel to be detailed by Brigadier General Comdg. 45th Inf. Bde.
 A Lieut-Colonel to be detailed by Brigadier General Comdg. 15th Div. Arty.
 O.C. or 2nd-in-Command of 15th Bn. M.G. Corps.

Attached are Lists of Units who occupied the places in question.

WITNESSES.

All Platoon Commanders whose Platoons or any portions of their Platoons were in occupation of the places mentioned will be detailed to attend to give evidence as to the condition of Billets when taken over and when vacated.

The Brigadier General Commanding 15th Div. Arty., C.R.E. 15th Division and O.C. 15th Bn. M.G. Corps will issue orders for all Officers under their Command who were in command of troops in above mentioned places to attend the Court of Enquiry.

In addition to the above witnesses who are required to attend, it is requested that all Commanding Officers who Commanded Units which occupied HOLLAIN, WEZ VELVAIN and Chateau De LANNOY during the period in question may be ordered to attend the Court.

With regard to Divisional Headquarters and 46th Infantry Brigade Headquarters it is requested that a Staff Officer be detailed to attend to give evidence.

With reference to witnesses required from 15th Bn. M.G. Corps it is requested that, in addition to witnesses already detailed, the Commanding Officer or 2nd-in-Command (whichever does not sit as a member of the Court) may attend as a witness.

If there are other witnesses not mentioned who could give evidence it is requested that they may be ordered by Commanding Officers concerned to attend the Court for that purpose.

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APPENDIX 71

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- 2 -

Evidence will be heard at the following hours concerning damage perpetrated at :-

- (a) (HOLLAIN 10.00 Hours, 19th November, 1918.
(Chateau de LANNOY
- (b) VELVAIN 10.00 hours 30th November, 1918.

Witnesses will therefore be required to attend accordingly.

Brigade Headquarters,
17th November, 1918.


Captain,
Staff Captain 46th Infantry Brigade.

| PLACE. | DATE. | UNIT. |
|-----------------------------|----------------------|--|
| 1. WEZ VELVAIN. | 22/10/18 - 24/10/18. | H.Q. & 1 Coy. 10th Sco. Rif. |
| | 24/10/18 - 27/10/18. | H.Q. & 1 Coy. 7/85h K.C.S.B. |
| | 27/10/18 - 29/10/18. | H.Q. & 1 Coy. 1/9th Royal Scots. |
| | 22/10/18 - 29/10/18. | 1 Sec. 3rd Australian Tunnelling Coy. (Attached 46th Inf. Bde.). |
| | 29/10/18 - 4/11/18. | H.Q. & 1 Coy. 4/5th Black Watch. |
| | 4/11/18 - 8/11/18. | H.Q. & 1 Coy. 8th Seaforths. |
| | 22/10/18 - 24/10/18. | H.Q. "D" Coy. 15th Bn. M.G.C. |
| | 24/10/18 - 2/11/18. | H.Q. "B" Coy. 15th Bn. M.G.C. |
| | 2/11/18 - 8/11/18 | H.Q. "A" Coy. 15th Bn. M.G.C. |
| | 8/11/18 | H.Q. 44th Inf. Bde., one day. |
| | 9/11/18 | Divisional H.Q. one night. |
| | 8/11/18 | 74th Field Coy. R.E. One day. |
| | 11/11/18 - 12/11/18. | 15th D.A.C. & 158 B.A.C. |
| | 2. HOLLAIN. | 22/10/18 - 24/10/18. | Posts of 10th Scottish Rifles. |
| 24/10/18 - 27/10/18. | | Posts of 7/8th K.O.Sco.Bord. |
| 27/10/18 - 29/10/18. | | Posts of 1/9th Royal Scots. |
| 29/10/18 - 4/11/18. | | Posts of 4/5th Black Watch. |
| 4/11/18 - 8/11/18. | | Posts of 8th Seaforth Highrs. |
| 8/11/18 | | Troops of 1/9th Royal Scots one night. |
| 3. Chateau de LANNOY. | 22/10/18 - 24/10/18. | 1 Sec. "D" Coy. 15th Bn. M.G.C. |
| | 24/10/18 - 2/11/18. | 1 Sec. "B" Coy. 15th Bn. M.G.C. |
| | 2/11/18 - 8/11/18. | 1 Sec. "A" Coy. 15th Bn. M.G.C. |
| | 8/11/18 | H.Q. 8th Seaforths - one day. |
| | 9/11/18 | H.Q. 7/8th K.O.S.B. - one day. |
| | 23/10/18 - 10/11/18 | H.Q. 4/5th Black Watch. 6" Trench Mortar Batteries, 15th Division. |

Several of the Battalions mentioned under (1) had at one time troops in LANNOY CHATEAU.

| PLACE. | DATE. | UNIT. | |
|-----------------------------|----------------------|--|--------------------------------|
| 1. WEZ VELVAIN. | 22/10/18 - 24/10/18. | H.Q. & 1 Coy. 10th Sco. Rif. | |
| | 24/10/18 - 27/10/18. | H.Q. & 1 Coy. 7/85h K.C.S.B. | |
| | 27/10/18 - 29/10/18. | H.Q. & 1 Coy. 1/9th Royal Scots. | |
| | 22/10/18 - 29/10/18. | 1 Sec. 3rd Australian Tunnelling Coy. (Attached 48th Inf. Bde.). | |
| | 29/10/18 - 4/11/18. | H.Q. & 1 Coy. 4/5th Black Watch. | |
| | 4/11/18 - 8/11/18. | H.Q. & 1 Coy. 8th Seaforths. | |
| | 22/10/18 - 24/10/18. | H.Q. "D" Coy. 15th Bn. M.G.C. | |
| | 24/10/18 - 2/11/18. | H.Q. "B" Coy. 15th Bn. M.G.C. | |
| | 2/11/18 - 8/11/18 | H.Q. "A" Coy. 15th Bn. M.G.C. | |
| | 8/11/18 | H.Q. 44th Inf. Bde., one day. | |
| | 9/11/18 | Divisional H.Q. one night. | |
| | 8/11/18 | 74th Field Coy. R.E. One day. | |
| | 11/11/18 - 12/11/18. | 15th D.A.C. & 158 B.A.C. | |
| | 2. HOLLAIN. | 22/10/18 - 24/10/18. | Posts of 10th Scottish Rifles. |
| | | 24/10/18 - 27/10/18. | Posts of 7/8th K.O.Sco.Bord. |
| 27/10/18 - 29/10/18. | | Posts of 1/9th Royal Scots. | |
| 29/10/18 - 4/11/18. | | Posts of 4/5th Black Watch. | |
| 4/11/18 - 8/11/18. | | Posts of 8th Seaforth Highrs. | |
| 9/11/18 | | Troops of 1/9th Royal Scots one night. | |
| 3. Chateau de LANNOY. | 22/10/18 - 24/10/18. | 1 Sec. "D" Coy. 15th Bn. M.G.C. | |
| | 24/10/18 - 2/11/18. | 1 Sec. "B" Coy. 15th Bn. M.G.C. | |
| | 2/11/18 - 8/11/18. | 1 Sec. "A" Coy. 15th Bn. M.G.C. | |
| | 8/11/18 | H.Q. 8th Seaforths - one day. | |
| | 9/11/18 | H.Q. 7/8th K.C.S.B. - one day. | |
| | 28/10/18 - 10/11/18 | H.Q. 4/5th Black Watch. 6" Trench Mortar Batteries, 15th Division. | |

Several of the Battalions mentioned under (1) had at one time troops in LANNOY CHATEAU.

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EXTRACT FROM FIFTH ARMY ROUTINE ORDERS
DATED 12th. NOVEMBER 1918.

Appendix 72

3347 - EXPRESSION OF APPRECIATION - The Army Commander wishes to express his appreciation of the work done by the 3rd. Australian, 170th., 250th., 251st., and 257th. Tunnelling Companies, in removing enemy traps and mines. The courage and determination displayed is beyond all praise and the Army acknowledges its debt of gratitude to the devotion shewn by all ranks of the Companies. The measure of success is recorded by the small number of mines and traps which have escaped detection.

- O.C., 170th. (T) Coy. R.E.
- O.C., 250th. " " "
- O.C., 251st. " " "
- O.C., 257th. " " "
- O.C., 3rd. Australian (T) Coy. ✓

| | |
|--|-----------|
| CONTROLLER OF MINES. FIFTH ARMY. | |
| No. | M.11/32. |
| Date | 17-11-18. |

Forwarded for your information.

Comp. Records
A.S.
Major
19.11.18.

M. Low
Capt. R.E.,
for Controller of Mines,
Fifth Army.



C.R.E., I Corps Troops. No.
1075/30.

App. 73.

O.C. 3rd Aust (T) Coy.

Please arrange to put in hand repairs to the
small bridge on the CALLENELLE - PERUWELZ Road at WIERS -
K.4.b.l.O. (Sheet 44).

This bridge should be made strong enough to
carry all loads.

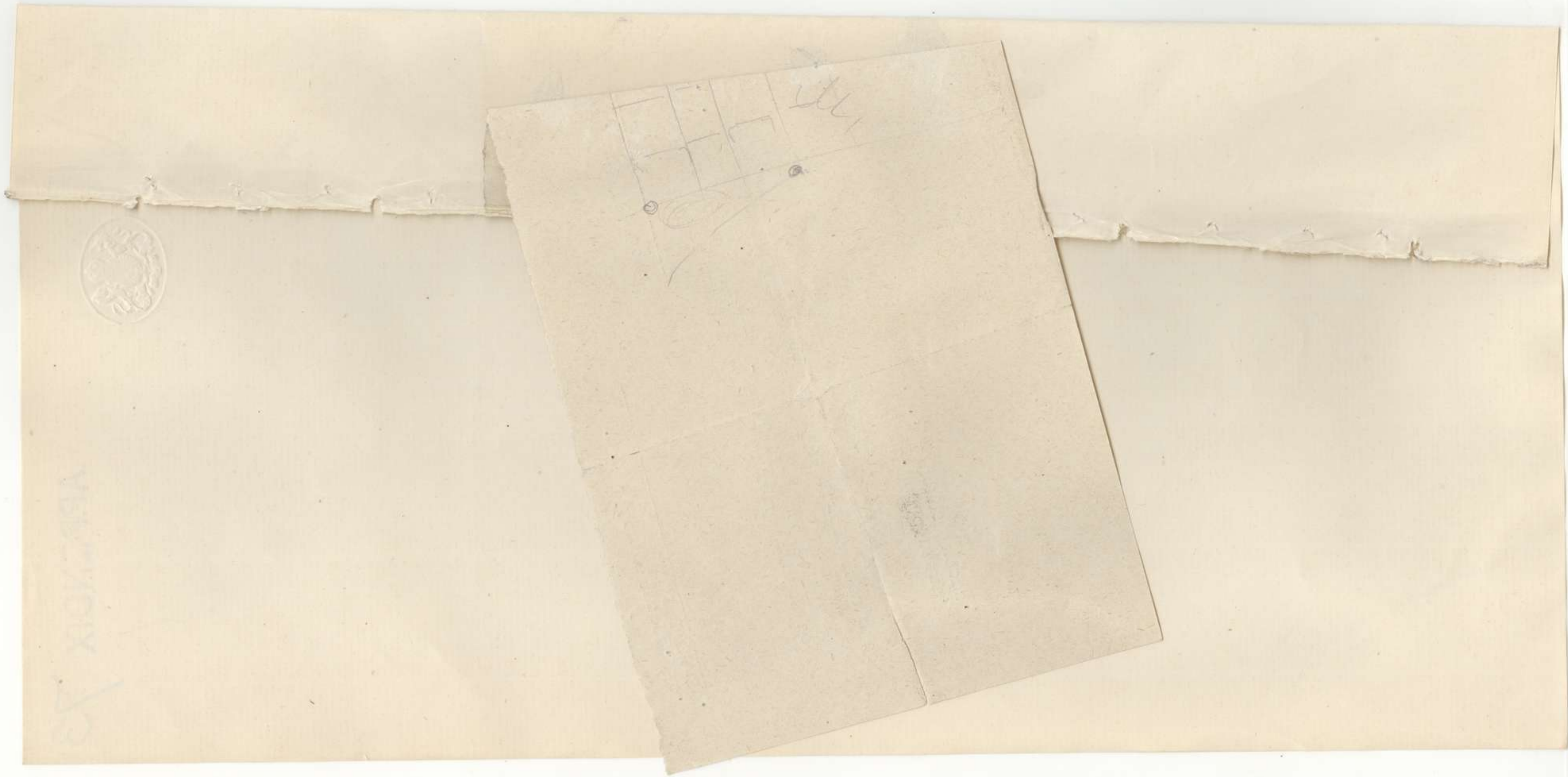
N. Clouston

Capt. & Adjutant,
R.E., I Corps Troops.

18.11.18.

| |
|----------------|
| C.R.E. |
| I CORPS TROOPS |
| |
| |

File



1914-1918

Handwritten text and a grid pattern on a piece of paper placed over the envelope flap.

C.O. 3rd A.T.C.

73

1) Re Peruvally Bridge,
Ample round timber is
available at saw mills (Scieries)
at both abutments of bridge, ^{French}
at South abutment at "Au Vert Bontois"
hard by; at "North abutment" on
1st turn to left.

2) In addition: two 14"x11" beams
32' 4" long & 1/18 are available
together with a jinker (TRIEBAL)
at 26d. 50.70. on North side of ^{French}
railway together with further
round timber. Decking is available
on Northern Saw mill mentioned
in para 1.

3) I am confident no
difficulty with regard to
timber will accrue.
12/11/18. J. Hillman Capt

App. 73

Peruvally Bridge

19/11/18

To Adjutant

3rd Aus Tunn Coy.

856

Enclosed please find order from
CRE 1st Corps Troops re bridge
at WIERS (K46.10) Sheet 44.
I mentioned this matter in a note
to you this morning.

W. Kennedy
for OC A Sect

19/11/18 1.30pm

Enclosed please find CRE orders
left at this place this morning
with above mentioned order re bridge.

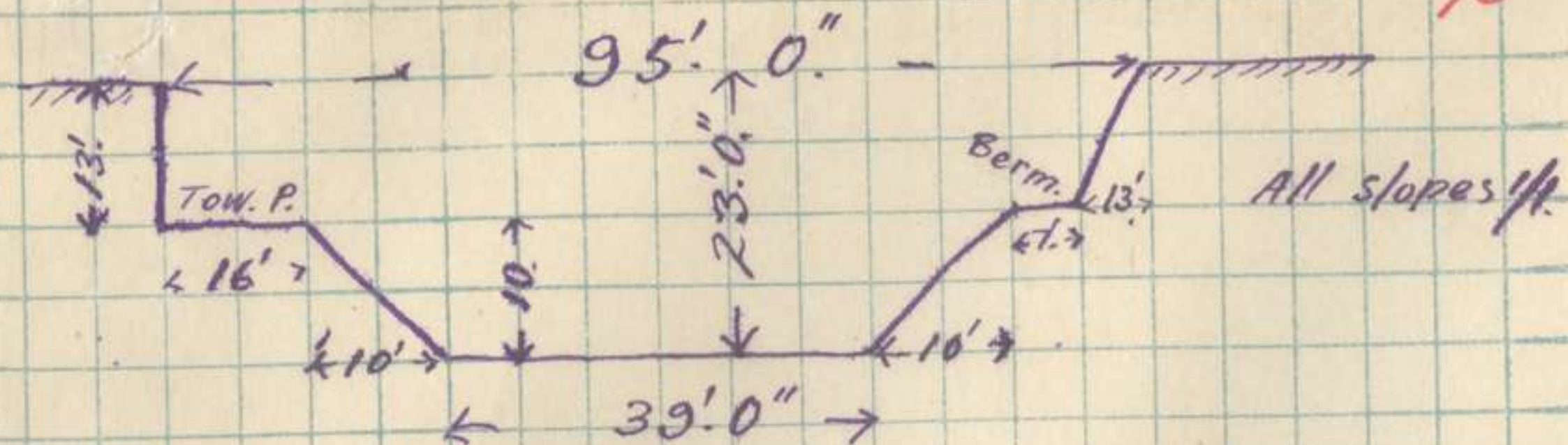
W.K.

APPENDIX 73

Bridge at Beloeil 45 B 9615.

①

93



1. Canal bed is at present dry.
2. Previous bridge was apparently a single brick arch of approximately 95' span in clear.
3. There is a tow path on North bank only.
4. Both abutments have been cratered but profile shown above reproduces the original section & shows what it is now necessary to bridge.
5. With the proviso that by building an abutment on Southern Bank the span could be reduced to by about 15 feet, i.e. to 80'.

73

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C. O. 3rd Australian Tunnelling Coy.

1. Reconnaissance report on Beloeil Bridge at 45 B. 96 1050 is enclosed in duplicate.

12/11/18.

S. J. Hillman. Capt.

APPENDIX 73

3rd Aust. Tan. Coy 73
"A" Section, Party at WEIRS Bridge

21st Work arranged by Capt HILLMAN & felled for party

22nd Party of 1 officer & 17 OR. proceeded to WEIRS (from PERUWELZ) put felled in order started clearing up ground at bridge.

23rd Abutments prepared for temporary bridge sills & bearer logs of same put in place approaches also partly made. Part of steelwork of old bridge was cut away & obstructions were removed from bed of stream at the bridge.

WEIRS

23/11/18

A. Warlow Davies

6). Without knowing what is 73
available it is difficult to ② 356
make a proposal. There is however
a Class "A" 60' span bridge which
was to have been erected at MAULDE.
This might with advantage be
placed on the northern approach
& would thus span the low part
and the greater part of the
waterway, still leaving ample
waterway for navigation. Cubbing
could be built on southern edge
of canal bed to take this span.
The remaining 35' or 15' will
para 5) could be bridged with
timber trestles either in
two spans or one. The
obtaining of timber for these
trestles spans would not present
much difficulty.

7). I RECOMMEND the adoption
of the proposal in para 6.

12/11/18.

A. J. Hillman. Capt.
2nd in Command 3rd A.T.C.

APPENDIX

73

Appendix 74

Copy of Wire.

356

C. No.

Serial No.
746A

Day of Month.
17

AAA

By 8/750 of 18 AAA War Office wires that following classes of coalminers are required in addition to face workers AAA PUTTERS TRIPPERS and underground hauliers and All men of above classes whose medical category is A or B1 will be included in the return AG/554/152 (B) furnished to 3rd Echelon by each unit and Ack. by memo and addressed recipients of 8/750.

I CORPS.

| |
|----------------|
| O.R.E. |
| I CORPS TROOPS |
| No. 1138 |

APPENDIX

74

2.

- O.C., 138 A.T.Co. B.E.
- 830 A.T.Co. B.E.
- 390 A.C.Co. B.E.
- 560 A.T.Co. B.E.
- 337 B.C.Co. B.E.
- 3rd Aust. (T) Co. ✓

For information and action, reference this office No. 1138 dated 17.11.18.

H.S. Clouston

Capt. & Adjutant,
B.E., 1 Corps Troops.

18.11.18.

File



File

Appendix 75

- O.C., 135 A.T.Co. N.E.
- 235 A.T.Co. N.E.
- 290 A.T.Co. N.E.
- 360 A.T.Co. N.E.
- 357 B.C.Co. N.E.
- 3rd Aus. (T) Co. ✓

| |
|----------------|
| C.I.E. |
| I-CORPS TROOPS |
| 105/10 |

Quite recently there have occurred a number of cases of poisoning in horses attended with fatal results, due to beans contained in the oats. These beans are slightly smaller than the ordinary horse bean and are easily seen.

When the beans are removed the oats are quite fit for use.

Please warn all concerned to be on the look out for same.

H.S. Clouston
 Capt. & Adjutant,

N.E., I Corps Troops.

19.11.18.

a + Qm.

Urgent attention, please

a.s.
Major
18/11/18

WFO



256
Lt. J. B. Shaw M.C. /

Appendix 76

3534.

Please let me have by morning of 21st instant some short notes on Mine Detection based on your experience during the recent operations.

All classes of mines dealt with should be included in your report.

Alex. Sanderson

Major,

11/18.

C.O., 1st Australian Tunnelling Company.

19/11/18

App. 77.

To 3rd Australasian Tunn Coy.

Ref attached the launching tackle for 60' span bridge is being sent up to you with the exception of rollers which have not yet arrived.

Rollers should be improvised.

W.S. Clouston

Capt & adjt

R.E.I. Corps Troops.

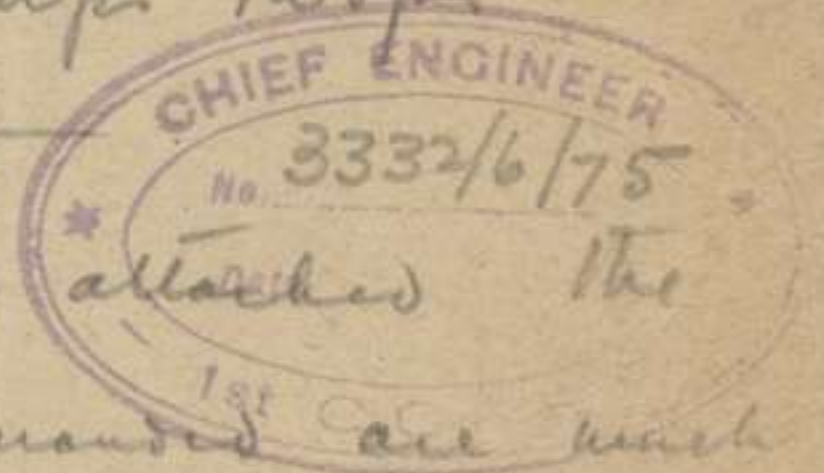
19.11.18.



File

App. 77

C.R.E. Corps Troops

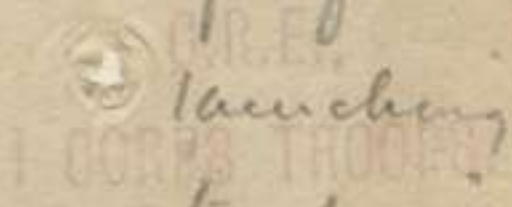


Reference attached the stores demanded are much in excess of those laid down for launching 60' span (vide p 17 Memo Construction & repair of Road Bridges)

Chiefly stores there laid down have been furnished by Army. These have already been issued to 290 & 560 AT Coy. except

Slings wire rope & launching rollers which have not been received from base, tho' despatched 31.10.18.

Slings are being sent up from Templeuve but launching rollers will have to be improvised



20.20 18.11.18.

18/11/18

C. T. T. Troops
Maj: R
for C. I. Coy

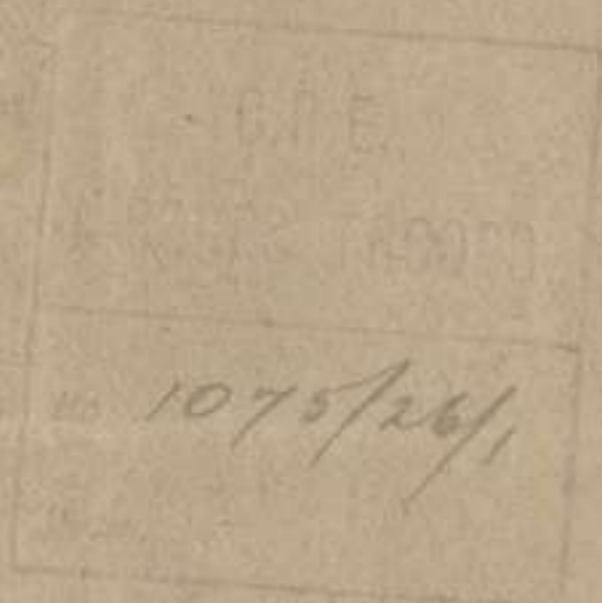
To CE.
I Corps.



The attached is forwarded to you please. Has complete launching gear for 60' span bridge been sent to Beloeil.

W.S. Clouston
Capt & Adj
RE I Corps Troops.

17.11.18



C.R.E.,
I CORPS TROOPS.



3525.

77

356

Could the following Launching Stores for the BELOEIL Bridge be sent to us, please:-

- ✓ 1 4-Ton Winch.
- ✓ 1 2-Ton Winch.
- ✓ 1 30' Derrick 12" x 12".
- 2 14" Treble Blocks for 3" Wire Rope.
- 2 14" Double Blocks for 3" " "
- 1 14" Snatch Block for 3" " "
- 2 100 fms lengths 3" Wire Rope.
- 4 100 fms " 2" " "
- 10 20 fms " 2" " "
- 2 10" Double Blocks for 2" Wire Rope.
- ✓ 10 Slings 3" Wire rope 10' long.
- 20 Clips for 3" Wire rope.
- 6 Single blocks for 2" wire rope.
- 6 Turnbuckles.
- 30 5' pickets for holdfasts.
- 3 2 Coils 2" cordage.

The above represents rather less than half what was used at Pont MAUDIT and was all sent from that place to the bridging dump at DON.

16-11-18.

E.P. Horn Lt. Adj.
for Major,
C.O. 3rd Australian Tunnelling Coy.

77



Appendix 78

I Corps No. 69 (G.D.).

On and after 21st Nov: the office hours of 356
offices of Corps H.Qrs. will be :-

Weekdays (except Saturdays) 9.am. to 7.pm.
Saturdays & Sundays 9.am. to 1.pm.

Matters of urgency only will be attended to at other times.

It is suggested that Divisions and H.A. should adopt the same hours so that there may be uniformity throughout the Corps.

20th November, 1918.

Sgt., FRANK WALKER,
Major G.S.,
for, Brigadier General,
General Staff I Corps.

- O.G., 135 A.T.Co. R.E.
- 230 A.T.Co. R.E.
- 290 A.T.Co. R.E.
- 680 A.T.Co. R.E.
- 657 R.C.Co. R.E.
- 3rd Aus. (S) Co. ✓

| |
|-----------------|
| C.R.E. |
| I CORPS TROOPS. |
| No. |
| |

For information.

N.S. Clouston

Capt. & Adjutant,
R.E., I Corps Troops.

20.11.18.

N.S.

Appendix 79.

G.H.Q. No. 4219.
20-11-18.

File
Controller of Mines,
Fifth Army.

I should be glad if you would obtain from O.C., Tunnelling Coys, in your Army a list of any articles of historical or educational interest which they would be prepared to present in the name of their Company to the School of Military Engineering, CHATHAM, or to the National War Museum.

It is desired to have a permanent Tunnelling Company record in both places, and I feel sure Companies will give all assistance they can.

To avoid duplication, when the lists are received, each Company will be asked to make up in a suitable form for permanent exhibition one or more of the articles mentioned.

(signed) H.R. Dixon.
Captain, R.E.
for Inspector of Mines.

O.C. 170th. (T) Coy, R.E.
O.C. 250th. " " "
O.C. 251st. " " "
O.C. 257th. " " "
O.C. 3rd. Aust. (T) Coy. ✓

CONTROLLER OF
MINES,
FIFTH ARMY.
H.R.D.
20-11-18.

complete.

For your information and necessary action.
List to be submitted to this Office when

H.R.D.
Capt. R.E.
for Controller of Mines,
Fifth Army.

O.C., 135 A.T.Co. R.E.
230 A.T.Co. R.E.
290 A.T.Co. R.E.
560 A.T.Co. R.E.
337 R.C.Co. R.E.
3rd Aus. (T) Co. ✓

Appendix 90

| |
|----------------|
| Q.M.E. |
| I CORPS TROOPS |
| No 1141 |

COMMAND.

During the absence of Lieut.-Col. C.MELLOR, R.E.
(Sick) - Major G.T.KINGSFORD, D.S.O., R.E., will act as
C.R.E., I Corps Troops.

W.S. Clouston

Capt. & Adjutant,
R.E., I Corps Troops.

20.11.18.

Copy to H.Q., I Corps.

File

in
the

I C
EC.

356

92

VERY URGENT.

A.G.554/1/F2 (M).

O.C.,
3rd Australian Tunnelling Coy.

Information is very urgently required as to the number of coal miners (Face workers only) serving in your unit.

Please complete and return the form shewn on reverse to D.A.G., 3rd Echelon by 24th November 1918. The envelopes should be marked D.R.L.S.

2. Attention is particularly directed to the following points :-

(a) The return should only include men of "A" or "B.i." medical category, and it is not to include any coal-miners, other than "Face workers".

"Face workers" may be defined as "workers underground employed in hewing or getting coal".

(b) Care is to be taken to shew accurately, in accordance with column 1 of the return, the districts in which the men worked before the war.

G.H. FOWKE.

Adjutant General.

G.H.Q.
13th Novr. 1918.

2.

O.C., 3rd Australian (T) Coy.

Appendix 92

The attached is forwarded for completion, in the event of any men of your unit being demobilised in the United Kingdom.

17.11.18.

O.R.E.
I CORPS TROOPS.
No 1138
Date.....

W. Clouston

Capt. & Adjutant,
R.E., I Corps Troops.

APPENDIX

92

R.

A.G. 554/1/F.2(M).

UNIT _____

1.

2.

3.

4.

| Coal Mining District. | Numbers of face workers category 'A' | Numbers of face workers category 'B1'. | Total. |
|--|--------------------------------------|--|--------|
| I. Scotland. | | | |
| II Counties of Northumberland and Durham. | | | |
| III North Wales. Counties of Anglesey, Carnarvon, Denbigh, Flint, Merioneth, and Montgomery. | | | |
| IV. South Wales and Monmouth. Counties of Cardigan, Pembroke, Carmarthen, Radnor, Brecknock, Glamorgan, and Monmouth. | | | |
| V. North of England. Counties of Cumberland, Westmoreland, Lancashire, Yorkshire, and Cheshire. | | | |
| VI. Midlands. Counties of Shropshire, Staffordshire, Derby, Nottingham, Leicester, Lincoln, Hereford, Worcester, Warwick, Northampton, Gloucester, Oxford, Buckingham and Berks. | | | |
| VII. Rest of England. | | | |
| GRAND TOTALS. | | | |

Signature of Officer Commanding.....

Date.....

Appendix 92
256

COPY OF WIRE.

C.R.E.

Sender's No.
836Q

Day of Month.
20

AAA

Fifth Army Wire begins aaa Coal miners are arriving
BOULOGNE insufficiently rationed for journey which in some
cases takes 4 days aaa Issue necessary instructions to ensure
sufficient train rations being issued to cover arrival
BOULOGNE aaa ends.

I CORPS.

2.

- O.C., 3rd Aus. (T) Coy. ✓
- 135 A.T.Co. R.E.
- 230 A.T.Co. R.E.
- 290 A.T.Co. R.E.
- 560 A.T.Co. R.E.
- 337 R.C.Co. R.E.

C.R.E.
I CORPS TROOPS.
1138

For information and action.

W. Clouston

Capt. & Adjutant,
R.E., I Corps Troops.

21.11.18.

A. H. ...
File

APPENDIX 92

356

AUSTRALIAN IMPERIAL FORCE



Headquarters, A.I.F.,
Care H.Q., Fifth Army,
21st November, 1918.

Appendix 93.

O.C.,
3rd Aust. Tunnelling Coy.

With reference to your 3535 of 19th inst. you are informed that as no more candidates for Cadet Schools in England are being selected, no action will be taken to send the three N.C.O.'s referred to to the Australian Corps Schools.

W. J. Murray
Lieut-Colonel,

A.A.G., A.I.F.



O.C., 3rd. Aust. (T) Coy.

CONTROLLER OF
Appendix 94
FIFTH ARMY.

M.45/13.
22-11-18.

It is probable that there are a number of Officers, and possibly N.C.Os., in Tunnelling Companies for whom there are posts waiting in the Coal Mining Industry whenever they are released. Will you please let me have a list of the names of such Officers and N.C.Os. in order that I may have it at hand, as, if any question of early release comes up, possibly very short notice will be given. It would be advisable in preparing this list that the names of the Firms under whom employment is to be obtained should be stated.

File

D. Lewis
Capt. R.E.,
for Controller of Mines,
Fifth Army.

356

Appendix 95

I Corps, D. 356.

C.R.O.
I Corps Troops.

Reference Corps Routine Order 3169.
Empty beer barrels for return to Brewers may be handed over to the R.T.O. TEMPLEMAN who has been instructed to accept them.

Information as to the approximate time of arrival at destination and number of casks returned to each Brewer should be wired to this Office to enable unloading arrangements to be made. The approximate time of arrival at the destination can be ascertained from the R.T.O. at the time the barrels are handed over.

Richard Taylor, Major.
for
Lieut.-Colonel,
A.C.F.C., I Corps.

I Corps H.Q.
L. 21/11/19.

Copy to R.T.O. TEMPLEMAN.

2.

O.C., 135 A.T. Coy. R.E.
250 A.T. Coy. R.E.
290 A.T. Coy. R.E.
560 A.T. Coy. R.E.
357 A.C. Coy. R.E.
3rd Aust. (T) Coy.

| |
|-----------------|
| C.R.O. |
| I CORPS TROOPS. |
| 1144 |

For information and necessary action.

22/11/19.

No barrels in possession of this Unit. E.M. [unclear] file [unclear]

W.S. Clouston
Capt. & Adjutant,
R.E., I Corps Troops.

356

Appendix 96.

O.C., 3rd Australian (T) Coy. ✓

As soon as the bridges on which you are working in the forward area are completed and the launching gear and surplus bridge parts are returned to TEMPLEUVE, you will move your Coy. to the neighbourhood of CHEMY, subject to the party on ESCAUT, of 4 Officers and 120 O.R. being left to work under C.E.VIII Corps, and a party of 1 Officer and about 20 O.R. being attached to C.R.E. 58th Div. for investigation of any mines which may subsequently be formed.

There is no objection to you sending an advance party to CHEMY to make preliminary arrangements as regards billets.

Please forward H.B.21 and detailed report in accordance with this office No. 1075 dated 21.10.18 for the bridges you have built, as soon as possible.

The daily report on the work on the ESCAUT River should also be sent in.

| |
|-----------------|
| C.R.E. |
| I CORPS TROOPS. |
| No. 1058/24 |
| Date |

C. J. Thompson

Major, R.E.,

A/C.R.E., I Corps Troops.

23.11.18.

Copy to C.R.E. 58 Division.

File

356

C.E., First Army No. 4170.

Appendix 97.

Chief Engineer,
I Corps.

All labor placed at your disposal by Fifth Army for Inundation work (believed to be the 3rd Australian Tunnelling Coy.) should be placed for work under Brigadier-General ARMSTRONG, Chief Engineer, VII Corps, who is in charge of the whole clearing work on the Canals.
Please direct them to get in touch with him.

Sgd., E.A. ATKINSON,
Major, General,
Chief Engineer, First Army.

20.11.18.

Copies to:- C.E. Fifth Army.
C.E., VII Corps.

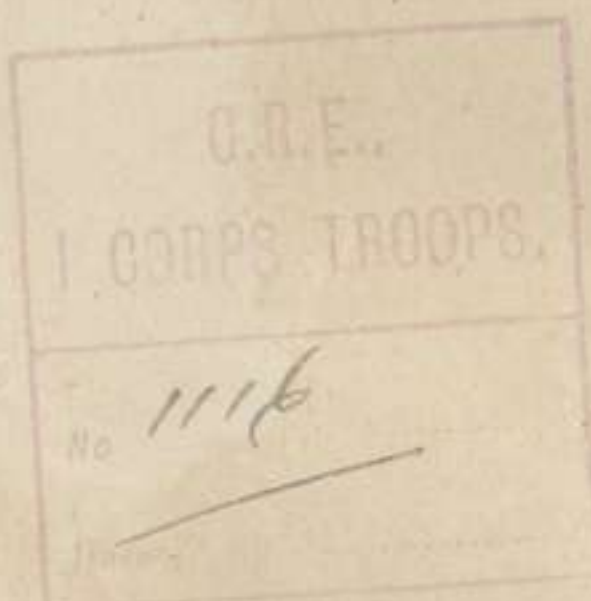
2.

O.C., 3rd Australian Tunnelling Coy.

Please instruct your parties working on the Canal to get in touch with C.E., VII Corps.

W.S. Clouston
Capt. & Adjutant,
R.E., I Corps Troops.

22.11.18.



356

Appendix 98

| | |
|---------------------------------|----------|
| C.R.E., VII CORPS TROOPS. | |
| No. | C.V. 5/7 |
| Date | |

O.C. "C" Section,
3rd. Australian Tunnelling Coy.,
Billet No. 139, ~~PROYENNES.~~ BRUYELLES.

I inspected the lock and weir at ANTOING today and found that the water level above the lock has risen .3 metres, below the lock it has fallen .15 metres.

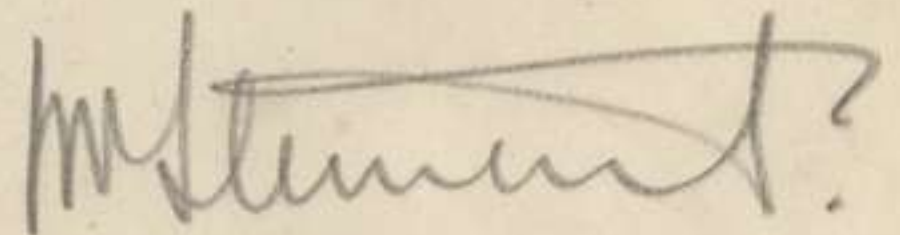
Will you kindly remove sufficient poutrelles from Weirs No.2 and 3 to cause the water level above the weir to be not more than .2 metres higher than the water level below the weir.

As regards weir No.1 - This appears to be closed by some form of permanent dam situated under the archway and a few feet down stream from the poutrelle chases. As it is necessary to ascertain the exact state of ~~the levels~~ ^{affairs} at this weir will you please do as follows :-

- (i) Entirely close the lock by poutrelles.
- (ii) Open the upper lock gates which are at present closed.
- (iii) Remove sufficient poutrelles from the upper end of the lock to allow water to flow through in equivalent ~~value~~ ^{volume} approximately to that now passing through weir No.1
- (iv) Entirely close weir No.1 by poutrelles inserted in the up stream chases. As soon as the flow through this weir has ceased, investigate the existing obstruction and let me know so that I can inspect it myself. While this weir is closed, regulation of the river can be carried out through the lock ~~at~~ ^{and} weirs No.2 and 3 by manipulation of poutrelles.

Note. In the above orders I have numbered the weirs from West to East. Sequence being :-

- (a) Lock.
- (b) No.1 Weir.
- (c) No.2 Weir.
- (d) No.3 Weir.



22nd. November, 1918.

Lieut.-Colonel. R.E.
C.R.E. VIIth. Corps Troops.



"C" FORM.
MESSAGES AND SIGNALS.

Army Form C. 212.
(In books of 100.)

No. of Message

| | | | | |
|----------------------|------|----------|--------------------|---------------|
| Prefix | Code | Words 29 | Sent, or sent out. | Office Stamp. |
| Received from | By | | At | m. |
| Service Instructions | | | To | |
| | | | By | 20.11.18 |

Handed in at CCO Office m. Received 7326m.

TO O.C. "C" Section, 3rd Australian
Tunnelling Coy., Billetering No. 1
139 BRUYELLES

| * Sender's Number. | Day of Month. | In reply to Number. | AAA |
|--------------------|---------------|---------------------|---------|
| C T 3 | 20 | | AAA |
| Please | let | out | another |
| foot | of | water | from |
| dam | at | BLEHARIES | |
| tomorrow | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

FROM CRE. 7th Corps.

PLACE & TIME

* This line, except AAA, should be erased, if not required.
 W.L.W.S.V.E.L.E. 621,000 Pubs. 2/18, A.P.Ltd. (K3612)

Antlong Lock No 1.

Appendix 99

23.11.18

O.C. Section, 3rd Aust Coy.

356

Please carry out work as follows:—

1. Weir No 3. Remove by blasting if necessary, at once all portholes in the downstream chases of both openings in Weir + control water by portholes in upstream chases only.
2. Weir No 2. Clean debris + remove all portholes.
3. Weir No 1. When above jobs are done then put in portholes here + close completely. Lock. Open both gates wide + let water run for present. As soon as control is fully established at No 3 + No 2 insert portholes by degrees + gain control here also.

23/11

~~My~~ ~~James~~ ~~Stokes~~
CRE IV

APPENDIX

99

"C" FORM.
MESSAGES AND SIGNALS.

Army Form C. 2123
(Books of 100.)
No. of Messages **856**

Prefix Code Words

Received from **270** By **11**

Service Instructions

Sent, or sent out. Office Stamp.

At m.

To **99**

By

Handed in at **270** Office **18/17** m. Received **11** m.

TO **113 3rd Dist T Coy**

| * Sender's Number. | Day of Month. | In reply to Number. | AAA |
|--------------------|------------------|---------------------|-------------|
| 157 | 20 | | AAA |
| 11 | 5 | 1111 | 1111 |
| 1111 | Montreuil | ANTOIN | 1111 |
| 1111 | 1111 | 1111 | 1111 |
| 11 | 1111 | 1111 | 1111 |

FROM **1111 1111**

PLACE & TIME **1111 1111**

* This line, except AAA, should be erased, if not required.
(3287) W.L.W54/P738. 691,000 Pads. 3/18. A.P.Ltd. (K3013)

APPENDIX

99



AUSTRALIAN IMPERIAL FORCE

Appendix 100

Extract from

Headquarters, A.I.F.
Card H.Q., Fifth Army,
26th November, 1918.

CIRCULAR MEMO. DAG AIF 19/1224

APPLICATIONS FOR DISCHARGE IN UNITED KINGDOM

It is notified for the information of all concerned that each application for discharge in England on demobilization will be considered on its merits by the Demobilization authorities.

Any applications for such discharges should be made by the men concerned through their Commanding Officers, stating the reasons for the desire to be discharged in England, nature of employment available, etc. Such applications will be forwarded direct to Administrative Headquarters, A.I.F. London by
Headquarters, Aust. Corps - for Corps Troops.
Headquarters of Divisions.
Officers Commanding units outside Aust. Corps.

*Publish ~~in~~ notice
under ~~units~~ orders.
A.S.
Major*

Arthur Murray Major.
Lieut-Colonel,
A.A.G. A.I.F.

Appendix 101.

I Corps No. A.670.

356

G.R.E., Corps Troops.

Reference para. 1 of I Corps A.670 of 21st instant, the Corps Examining Centre for coal miners will be the Corps Troops Reception Camp, PORTE D'ARRAS, LILLE, - Q.15.a.D.3. (Sheet 36).

The Officer i/c will be the Adjutant Corps Troops Reception Camp.

I Corps H.Q.
22/11/18.

Sgt., ... THOMPSON, Major,
A/D.A.A.G., I Corps.

2.

- G.C., 135 A.T.Co. R.E.
- 230 A.T.Co. R.E.
- 290 A.T.Co. R.E.
- 580 A.T.Co. R.E.
- 337 R.C.Co. R.E.
- 3rd Aus. (T) Coy. ✓

For information, I Corps No. A.670 was forwarded you under this office number 1138 dated 22.11.18.

N.B. Clouston

Capt. & Adjutant,
R.E., I Corps Troops.

25.11.18.

| |
|----------------------------|
| G.R.E., I CORPS TROOPS. |
| No 1138 |

N.B.

APPENDIX 101

*Appendix 102*EXTRACT FROM I CORPS "Q" SUMMARY No.27.

2. BRIDGES. - The First Line Transport Bridge at MAUBRAY (V.30.c.8.2.- Sheet 37), will be closed to traffic from 08.00 hours 27.11.18, until further orders. C.R.E., Corps Troops to report when the bridge re-opens. (I Corps No. Q.873/2).

4. MOVES.- (1). I Corps H.Q. to CYSOING on 2.12.18.

I Corps. H.Q.
26.11.18.

Sgd., H.MALET,
Lieut.-Colonel,
A.Q.M.G., I Corps.

To. 135 A.T.Co. R.E.
230 A.T.Co. R.E.
290 A.T.Co. R.E.
560 A.T.Co. R.E.
331 R.C.Co. R.E.
337 R.C.Co. R.E.
3rd Aus. (T) Coy. ✓

256

Appendix 103

Dear General,

Three Temporary Officers are required to fill the posts of Inspectors of Works under the Imperial War Graves Commission in ITALY, SALONIKA and PALESTINE. The particulars as regards these appointments are as follows:-

Rank : Lieut.Colonel.
 Pay : £700 a year, rising by annual increase of £50 to £900 a year.
 Age : Immaterial, provided the Officer is reasonably fit and active.
 Qualifications: General knowledge of construction and materials, and general contract work, with ability as an organiser.
 Duration of appointment: Till the work of the Commission has been completed.

They will be paid by the I.W.G.C., and will become Civilians at the end of the War.

They are wanted too quickly to permit of their being found by advertisement in G.R.Os. I have been asked to ask you whether you know of anyone personally whom you could recommend, and who would take the job. If so, will you kindly let me know their names and qualifications.

G.H.Q.,
22.11.18.

Yours sincerely,
R.LUKER (A.I.A.G.)

- 2 -

U R G E N T.

Chief Engineer,
I Corps.

Will you kindly wire names of Officers, together with their qualifications, recommended for this appointment.

24.11.18.

(Sgd)., E.ATKINSON,
Major General,
Chief Engineer, First Army.

- 3 -

C.R.E., Corps Troops.

Please wire immediately to this office, as in minute 2.

26.11.18.

Sgd., D.W.GREEN,
Captain, R.E.
S.O., to C.E., I Corps.

O.C. 3rd Aus. (T) Coy ✓

- 4 -

O.C., 135 A.T.Co. R.E.
230 A.T.Co. R.E.
290 A.T.Co. R.E.
560 A.T.Co. R.E.

Please wire per return your recommendations, "NIL" reports to be rendered.

26.11.18.

K.S. Clouston
Capt. & Adjutant,
R.E., I Corps Troops.

✓

| |
|-----------------|
| C.R.E., |
| I CORPS TROOPS. |
| No 109/51 |

356

Fifth Army No. Q.121/7.

1.

I Corps No. Q.925.

Agricultural Officer.
Fifth Army.

With reference to your report ending November 16th, 1918 and demands for assistance for the French.

Please decentralize all such demands to the Corps in whose area the help is required.

In the case of the Army Area the demands for assistance should be forwarded direct to D.D.S. & T.

The Army Commander desires that every assistance be given to the farmers consistent with the maintenance of the efficiency and welfare of the Army.

The assistance given will be free.

Sd. Percy HAMBRG,
Major-General,
D.A. & Q.M.G., Fifth Army.

23.11.18.

2.

X X X X X
X X X X X
C.R.E.

For information.

Sgt., H. MALET,
Lieut.-Colonel,
A.Q.M.G., I Corps.

I Corps H.Q.,
25.11.18.

Copy to :- Corps Horsemaster,
A.D.V.S.,
Agricultural Officer.
French Mission.
Belgian Mission.

3.

O.C., 135 A.T.Co. R.E.
230 A.T.Co. R.E.
290 A.T.Co. R.E.
560 A.T.Co. R.E.
331 R.C.Co. R.E.
337 R.C.Co. R.E.
3rd Aus. (T) Coy. ✓

G.R.E.
I CORPS TROOPS
No 1145

For information.

W.S. Clouston

Capt. & Adjutant,
R.E., I Corps Troops.

26.11.18.

File

AUSTRALIAN CORPS,
26th November, 1918.

1. Additional recreational training material is available for divisions and units of Corps Troops in accordance with Table "A" attached.

The allotment has been worked out taking into consideration the previous allotment of such material.

2. Divisions and Units of Corps Troops should arrange to collect their allotment from D.A.D.O.S., Australian Corps Troops, at BUSIGNY, who will take receipts for all material so issued.

D.A.D.O.S., Corps Troops will forward receipts taken each day to Supt. P. & R. T., A.I.F.

3. As this may be the last issue of footballs for some time, units should keep a reserve for use on special occasions in the future.

4. Units of the CORPS HEAVY ARTILLERY will be issued with recreational gear under separate arrangements being made by the SUPP. P. & R. T., FOURTH ARMY.

R. C. Carey

Brigadier-General,
General Staff
Australian Corps.

DISTRIBUTION.

- 1st Australian Division.
- 2nd Australian Division.
- 3rd Australian Division.
- 4th Australian Division.
- 5th Australian Division.
- G. O. C., R.A.
- A. C.
- C. E.
- D. D. R. S.
- S. M. T. C.
- A.D., Sigs.
- A. D. O.
- D.A.D.O.S., Corps Troops.
- 13th L. H. Regt.
- Corps Cyclist Battalion.
- 3rd Army Bde. A.F.A.
- 6th Army Bde. A.F.A.
- 12th Army Bde. A.F.A.
- P.&R.T. A.I.F.

- 1st Aust. Tunnelling Co. A.E.
- 2nd Aust. Tunneling Co. A.E.
- 3rd Aust. Tunnelling Co. A.E. ✓
- 1st Aust. Army Troops Co. A.E.
- Camp Commandant.
- Corps Engineer Workshops.
- Corps Signal Company.
- 1st Aust. M. T. Co.
- 2nd Aust. M. T. Co. ✓
- 3rd Aust. M. T. Co.
- 4th Aust. M. T. Co.
- 5th Aust. M. T. Co.
- 6th Aust. M. T. Co.
- 3rd Squadron A. F. C.
- 1st Aust. Vet. Evacuation Station.
- Corps Salvage Company.
- Corps Baths Officer.
- Q.

APPENDIX/05

TABLE

| UNIT. | Footballa (complete) | Bladders. (spare) | Boxing Gloves (pairs) | Indicator football |
|---------------|-------------------------|----------------------|--------------------------|-----------------------|
| 1st Division. | 52 | 40 | 16 | 1 |
| 2nd Division. | 52 | 40 | 16 | 1 |
| 3rd Division. | 51 | 40 | 16 | 1 |
| 4th Division. | 51 | 40 | 16 | 1 |
| 5th Division. | 51 | 40 | 16 | 1 |
| Corps Troops | 63 | 50 | 20 | 5 |
| Total. | 320 | 250 | 100 | 10 |

DISTRIBUTION TO UNITS OF CORPS TROOPS.

| | | | | |
|---|----|----|----|---|
| Aust. Corps Headquarters | 6 | 2 | 3 | 1 |
| 3rd Army Bde A.P.A. (includes Sig. Sub Sectn) | 6 | 3 | - | 1 |
| 5th Army Bde A.P.A. (includes Sig Sub Sectn) | 6 | 3 | - | 1 |
| 12th Army Bde A.P.A. (includes Sig. Sub Sectn) | 6 | 3 | - | 1 |
| 13th L. H. Regiment. | 1 | 1 | 1 | - |
| 1st Army Troops Co. A.S. | 1 | 1 | - | - |
| 1st Tunnelling Co. A.S. | 2 | 2 | - | - |
| 2nd Tunnelling Co. A.S. | 2 | 2 | - | - |
| 3rd Tunnelling Co. A.S. | 2 | 2 | - | - |
| Corps R. Workshops. | 1 | 1 | 1 | - |
| Corps Signal Co. (includes 1st and 2nd Cable Sec., 1st and 2nd Air Sec., Corps Wls Sectn.) | 2 | 2 | - | - |
| 1st M. T. Co. (includes No. 1 A.S.T. Co. D.S. Sectn. and Company Workshop.) | 2 | 2 | - | - |
| 2nd M. T. Company | 2 | 2 | - | - |
| 3rd M. T. Company. | 2 | 2 | - | - |
| 4th M. T. Company. | 2 | 2 | - | - |
| 5th M. T. Company. | 2 | 2 | - | - |
| 6th M. T. Company. | 1 | 1 | 1 | 1 |
| 3rd Army Bde. A.P.A. Park Sectn. M.T. | 1 | 1 | 1 | - |
| 12th Army Bde. A.P.A. Park Sectn. M.T. | 1 | 1 | 1 | - |
| 6th Army Bde A.P.A. Park Sectn. M.T. | 1 | 1 | 1 | - |
| 1st Aust. Vet. Evac. Bn. | 1 | 1 | 1 | - |
| 3rd Squadron. A.P.C. | 1 | 1 | 1 | - |
| Corps Cyclist Battalion | 1 | 1 | 1 | - |
| Corps Salvage Coy. | 1 | 1 | 1 | - |
| Corps Baths. | 1 | 1 | 1 | - |
| Totals. | 54 | 41 | 14 | 5 |

"A" Form
MESSAGES AND SIGNALS.

Appendix 106
Army Form C. 2121
(in pads of 100.)

Prefix Code m. Words. Charge. No. of Message

Office of Origin and Service Instructions. This message is on a/c of. Recd. at m.

Sent Service. Date
At m. From *356*

To By
By (Signature of "Franking Officer.")

TO } *C.R.E. VII Corps Troops*

Sender's Number. Day of Month. In reply to Number. AAA

* *B132* *27* *CT 36* *AAA*

Selected Parties of this unit at Bunnhelles and Bleharics under Captain McARDELL will be made up to strength of 3 Officers and 120 C.R.'s if required as verbally arranged with you on 25th instant.

File

From *3rd Aust. Imm. Coy.*

Place

Time

The above may be forwarded as now corrected. (Z)

Censor. *Alex Sanderson*
Signature of Addressor or person authorised to telegraph in his name.

* This line should be erased if not required.

APPENDIX
106



Appendix 107

"A" Form
MESSAGES AND SIGNALS.

Army Form C. 2171
(in pads of 100.)

No. of Message

| | | | | | |
|--|------------|------------------------------------|---------|----------------------------|----------------|
| Prefix | Code | Words. | Charge. | This message is on a/c of. | Recd. at |
| Office of Origin and Service Instructions. | | Sent | |Service. | Date |
| At | | To | | | From |
| By | | (Signature of "Franking Officer.") | | | By |

TO { *Pl. "D" Section.*
3rd Aust. Inf. Coy

Sender's Number. Day of Month. In reply to Number. **AAA**

* *Belocil*

Reference attached.

Please make strict enquiries and notify all O.R.s that they are not to trespass on the private rights of citizens in the manner stated without permission obtained through an officer of this unit.

Any disobedience must be immediately reported and will be severely dealt with.

It is hoped that your intimation will be sufficient to make the men of this unit do everything in their power to restrain others from spoiling the good name of the British Troops.

From *Ala. Sanderson*

Place

Time

The above may be forwarded as now corrected. (Z)

27/11/18 Censor. Signature of Addressee or person authorised to telegraph in his name.

* This line should be erased if not required.

(1539). Wt. W3253/P511. 200,000 Pads. 2/18. H. C. & L., Ltd.

356

C.,
172nd, 175th, 178th, 179th Tunnng. Coy., R.E.
185th, 250th, 253rd, 257th " " "
3rd Australian Tunnelling Company.
New Zealand Engrs. Tunnelling Company.



Will you please forward the following information, making it as definite as possible:-

- (1). Number of Bridges, Heavy and Light, constructed by your Company since 8th August, 1918.
- (2). Revised total of Traps etc. removed from 8th August 1918, as under:-

- Land Mines.
- Anti-Tank Mines.
- Delay Action Mines.
- Other Traps.
- Enemy Demolition Charges.
- Total weight of Explosives removed.
- Gas Shells removed.
- No. of British Demolition Charges removed.
- Total weight of British " " "

- (3). List of Immediate Honours and Awards obtained by your company since 8th August, 1918.

This information is required as a check on my figures with a view to publication among those concerned.

Army, H.Q.,
27th Novr. 1918.

A.C.B. Kralovichinski Capt Reg
For. Lieut: Colonel, R.E.,
Controller of Mines,
First Army.

File

358

Director of Education,
A. I. F.

In compliance with instructions received from the General Staff, Australian Corps, I have to inform you that Chaplain the Rev. W. J. GRAY B.A., is nominated as Unit Education Officer to this Company and is at present carrying out such duties.

[Handwritten signature]

Lt. Adjt.,
for Major,

C.O., 3rd Australian Tunnelling Company

30/11/18.

Copy to Asst. Director of Education,
Australian Corps.

Appendix III

356

Controller of Mines,
Fifth Army.

COPY.

3493.G.
13-11-18.

I should be glad if you would send me some
Notes on Mine Detection based on the experience gained in the last few
months by Coys. in you Army.

G.H.Q.

(sgd) H.R.DIXON. Capt.R.E.,
for Inspector of Mines.

- O.C., 170th. (T) Co.R.E.
- O.C., 250th. " " "
- O.C., 251st. " " "
- O.C., 257th. " " "
- O.C., 3rd.Aust. (T) Coy. ✓

CONTROLLER OF
MINES.
FIFTH ARMY.

No. 37/86.
17-11-18.

Date.....

short
Reference above, please let me have by the
23rd.inst., Notes on your experience in connection with the search for,
and removal of, mines during the recent operations. All classes of
mines should be included in your report.

H.R. Dixon
Capt.R.E.,
for Controller of Mines,
Fifth Army.

APPENDIX III

356

Controller of Mines,

FIFTH ARMY.

Appendix 112

| | |
|--------------------------------------|----------|
| 3rd AUSTRALIAN TUNNELLING COY. | |
| No. | 3548. |
| Date | 23-11-18 |

Replying to your M37/86 of 17-11-18, please.

The undermentioned Notes on Mine Detection are based on the experience gained by the officers of this unit during the last few months.

1. In most cases mines and traps have been found where it was naturally expected to find them, e.g.
 - (a) At important cross roads and along main roads.
 - (b) Railway road Crossings and culverts under roads and railways.
 - (c) Railway junctions especially near points and crossings.
 - (d) Railway Station Yards (Particularly for long Delay Action Mines).
 - (e) Along belts of wire protecting important tactical points. (Tank traps especially in these places).
 - (f) In dugouts, cellars, buildings, munition dumps, bridge abutments, etc.

One lesson to be learnt from these facts is to "Study the Map" and mark beforehand the most likely places for the enemy to set mines and traps. Confirmation can often be obtained by a close study of Aerial photographs, particularly is this so in respect of the mines referred to in (e) above.

2. In country inhabited by civilians valuable information can often be obtained ~~especially~~ from the small boys who seem to know everything.

3. The following are good indications of mines:-

- (a) Small subsidences or soft spots in the road, by the roadside, or along the railway. These are generally easily detected, more so after rain has fallen, and are a reliable indication.
- (b) Signs of the surface soil having been disturbed or the presence on the surface of particles of subsoil.
- (c) Pieces of fuse or explosive, empty shell baskets or boxes, the wind vanes of T.M. shells and the temporary iron screw plugs or nose caps from the nose of a shell are good indicators, if found lying about, of the presence of a mine in the vicinity.
- (d) Electric wires or fuses projecting above the surface of the ground.
- (e) Delay action mines in dugouts are frequently close to the bottoms of the inclines. Examine closely between the timbers for marks made by the tool used for prising out the set, and near the cap for marks made by driving back the set. Chalk or soil marks on the timber (finger prints) or on the floor of the dugout, or absence of dust and cobwebs between the sets when others are thickly coated, are signs to be looked for. In several cases a cross or circular mark made with chalk has been noticed on the set which has been taken out in order to place the mine. Attempts had been made to obliterate these marks but they were still discernable on close inspection. The use of a magnetic compass for finding D.A. shell mines in Dugouts is often of service.
- (f) Road Mines are usually found on each side of the road in pits from 4 to 5 feet deep and generally consist of two large T.M. shells, to be fired electrically or by safety fuse. A few road mines were found which had been placed by sinking in the floor of cellar near by and driving a gallery therefrom under the road. After laying the mine the gallery shaft and cellar were filled with debris and the upper portion of the building crumped. As a rule this was done at important cross roads only.

In Courrieres Road Mines (Delay Action) were laid in the sewers which were afterwards blocked and flooded.

O. Comp. Records

(Continued).

356

Tank Mines have mostly been found in the belts of wire. Freshly turned earth should be looked for. In a number of instances small pieces of white tape were tied to the wire over the mines. In other cases the enemy small notice board "Tank Minenfeld" had not been removed.

Tank mines were also found laid in channels transversely across the road. These were very obvious to anyone walking over them but might not have been noticeable from a Tank.

- (h) Land Mines for Infantry . Difficult to detect. Usually fine trip wires along the grass near sides of tracks and sides of roads. The best indication was the slight withering of the grass along the edges of the turf which was placed on top of the mine, or on bare ground a slight disturbance of the soil. Generally the mines were laid in multiples of 10 and this assisted in their discovery when once one mine was found.
- (i) A steel walking stick of small diameter was found handy for probing and finding soft spots.
- (j) In some cases particularly on Railway lines small bushes or branches were used to screen the holes from aerial observation, before the charges were laid. These bushes or branches were generally thrown aside when the mines were set. They were a good indication of mines in the vicinity.
- (k) The enemy almost invariably strewed rubbish on the floor of a cellar or dugout where a mine or trap had been laid. The rubbish was made to look as if it had been there for a considerable time.
- (l) Booby traps were generally found only in the better class of dugout, or enemy Headquarters, or in bomb stores.
- (m) It was evident from the similarity in laying the different classes of mines that the enemy worked to a general plan which only varied by the degree of thoroughness with which the work was carried out by the different units.
- (n) The most difficult mines to find were those set in boreholes, generally about 7 feet deep and 10 inches diameter.

23-11-18.

Major,
C.O. 3rd Australian Tunnelling Company.

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3rd AUSTRALIAN TUNNELLING COMPANY. STANDING ORDER NO. 11.

BY MAJOR A. SANDERSON M.C.

COMMANDING OFFICER.

ORDERS IN THE EVENT OF FIRE.

- (1) The attention of all tanks is called to General Routine Order No. 2717 and "Precautions against Fire" which are posted up in huts, billets, etc and read out on parade once a month.
- (2) The Company Military Police shall at least three times a week during patrols visit the huts, billets etc, to see that the precautions referred to in paragraph (1) above are being strictly carried out.
- (3) If a fire breaks out in a hut or billet the N.C.O., or man in charge must at once give the alarm and send for the nearest officer. He shall immediately take proper steps to extinguish the fire and everyone must be cleared out except those men required for that purpose.
- (4) Section Commanders will be held responsible for seeing that the precautions referred to above and all the precautions against fire which are, in their opinion, necessary, are ~~prop-~~erly carried out in the billets occupied by the reliefs of their respective sections and in the tunnels and dugouts under their charge. It is the duty of all officers to see that every precaution is taken against damage or destruction by fire.
- (5) There must be no indiscriminate lighting of fires in billets or dugouts. No fire will be lighted in any place unless permission to do so has been given by an officer.
- (6) Engine Rooms ~~and~~ Petrol Stores and Underground Cook-houses will be provided with wooden doors covered within, and a number of filled sandbags will be kept in suitable positions, so that, when a fire breaks out the doors can be shut and a barricade of sandbags rapidly constructed to isolate the fire. A bucket of sand will be kept near each cookhouse, engine room and store to use in extinguishing small fires.
- (7) When a fire breaks out underground, the officer, N.C.O., or man in charge responsible for giving warning will clear everyone, at once, out of the whole system, or, if the portion of the system in which the fire has started can be properly isolated by gas and fire-proof doors, out of that portion of the system, sending everyone out in one direction, if possible away from the fire. As the fumes are poisonous and far reaching in their effects, the tunnels, entrances and trenches in their vicinity must also be kept clear of men.
- (8) Men must not wait to put on equipment.
- (9) All tins containing petrol must be clearly marked in large letters PETROL.
- (10) In all extensive dugout or tunnel systems fire and gas proof isolation doors, with handy stores of filled sandbags on each side of them, will be constructed at suitable points, so that each section can be isolated as may be necessary. These doors may be constructed so as to be used as draught regulating doors in a ventilation system, if required.
- (11) If a Mine Rescue Station is situated in the vicinity of the tunnel or dugout system, notices should be posted throughout the system showing its position. The men on duty at the station are available to render assistance in rescuing men and extinguishing the fire.
- (12) All fire places, stoves, etc., and also fire extinguishing appliances will be inspected by the section officer in charge and fire drills held at least once in every month.

Alex Sanderson
 23/11/17. d.c. 3rd Austral. Tunn. Coy.

EXTRACT FROM G.R.O. NO. 2717.PRECAUTIONS AGAINST FIRE.

1. Fires, stoves, braziers, naked lights and smoking, are forbidden in any room or barn which contains hay, straw or other inflammable material.
2. Where stoves or braziers are allowed in billets or huts, they must be placed on sheet iron or an earth or brick floor, and definite precautions must be taken to prevent ashes or bits of burning coal from falling out of the stove or brazier.
3. No open lighted brazier or naked light is to be left unattended in any hut or billet.
4. Cookhouses, Field Cookers, Forges and Incinerators, will not be placed against the walls of any buildings or in the vicinity of ricks or stacks of inflammable materials. Their precise position will be fixed by an officer.
5. Tent lanterns, when available, will always be used in billets, huts or tents; when these are not available and candles are used, they must be fixed in an empty tin to protect them on three sides and top and bottom, and placed as far as possible from any canvas or tarred material in the billet.
6. Petrol must not be used in any heating or cooking stove. Petrol, paraffin, oil and candles, must not be stored near any stove, brazier, fireplace or lamp.
7. Buckets or tins containing water, sand or dry earth, will be kept ready to hand in every billet or hut or tent for use in case of fire.
8. The greatest care must be used in throwing away matches or cigarette ends, knocking out pipes or handling lighted candles. It is the duty of every man to realize the danger to life and property caused by carelessness in such matters.

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Appendix 114

| | |
|-------------------------------|-------|
| J.F.O. | |
| AUSTRALIAN TUNNELLING COY. | |
| No. | |
| Date | 3561 |
| 29-11-18 | |

C.R.E..

I CORPS TROOPS.

Reference Clearing of the Escaut.

The following are particulars of work completed and in progress when taken over by C.E. VII Corps.

1. No.1 Lock Antoing, Pontrelles put in and Lock Gates opened.
2. Dam at D.26a 30.20. Mostly removed and two pontrelles wedged in position. Can be completed as soon as Escaut is lowered to normal level.
3. Breaches in Canal Bank near No.1 Lock in Antoing - Pommerial Canal. Filled in.
4. Trees and floating debris at J.12c 20.80. Removed. This is in VIII Corps area and work of clearing Lock is being taken in hand by parties of 176 Tunnelling Coy, R.E.
5. Syphon at D.3d 60.30 is clear and works when water is lowered in Escaut at No.1 Lock, Antoing.
6. Sluices at D.3a 20.30, V.26b 20.70, V.26b 30.10 and V.26d 95.10. Cleared and opened to drain flooded fields.
7. Breach in Canal Bank at J.3a 60.80. Can be repaired as soon as water is lowered at Antoing Lock.
8. Large quantities of floating debris which had accumulated at submerged Steel Bridges at D.3a 00.95, V.21c 30.70 and J.10a 40.70 were removed.
9. Large quantities of floating debris at D.26a 10.30 and J.10a 30.70 removed.
10. Submerged barrel foot bridges at V.21a 70.10 and V.21a 80.40 removed.
11. Sluice cleared and opened at J.2b 60.50.
12. Cleared drains in D.26d, J.3a and J.3c.
13. All timber and part of demolished steel Bridge removed from N. end of No.1 Lock Antoing. Large portion of Bridge still remains under water.
14. Large quantity of floating debris removed from trestle Bridge at Bleharies.
15. At Weir No.1 Antoing it was found impossible to put pontrelles in position as there are large blocks of masonry and bricks across the channel between the chases. Endeavouring to remove the broken masonry from the channel.
16. Debris partly removed from submerged bridges at J.9d 40.80, J.10a 10.20 and J.10a 50.70.
17. Pontrelle winches at Weir No.1 Antoing being jacked up into position.

(Continued).

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18. The following gear is required for clearing the channels at Anteing Weirs:-

- 1/4 ton winch and derrick with shackles.
- 1 set double and treble blocks to lift 20 tons.
- 60 fathoms 3" Steel wire rope.
- 4 wire rope slings 3" x 20 feet.
- 2/3 ton Jacks.

As all the debris is under water and no part visible it may be necessary to have a diver for fixing slings.

19. The main work that still requires to be done, excluding the removal of steel lattice bridges, is as follows:-

- (a) Removal of masonry debris of demolished bridges at Nos. 1, 2, and 3 Weirs Anteing.
- (b) Removal of about half steel swing bridge at No. 1 Lock, Anteing.
- (c) Completion of removal of dam at D.26a 20.30.
- (d) Breach in W. Bank of Escaut at J.3a 60.80 to be filled in. This will take about 5 weeks. It requires sheet piling and a very large quantity of filling which will have to be transported to the site.
- (e) Several small breaches which can be filled as the water is lowered at Anteing.
- (f) A fairly large quantity of debris continues to float down the river from higher up and ~~material~~ collects on the steel lattice Bridges which are partly submerged.

A good deal of the abovementioned work might be taken in hand by the Land Drainage Company if it is available.

Major,

C.O. 3rd Australian Tunnelling Company.

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APPENDIX 115

C.R.E.,
I Corps Troops.

| |
|-----------------------------|
| 3RD AUSTRALIAN TUNNEL |
| No. 3485 |
| Date 3-11-18 |

Reference your 1075.

Herewith, please, bridging report on Bridge erected over Haute Deule Canal at Meurchin (Sheet 44a H.6.d.75.40).

1. Instructions received on 19-10-18 to erect timber bridge to carry 5½ tons axle load.
2. Plan attached shows cross section of Canal and particulars of bridge erected.
3. Statement attached shows particulars of safe load, working party table, etc.
4. Unit responsible for work:- 3rd Australian Tunnelling Company. C.O. Major A. Sanderson, MC. Captain R.Y. Langdon and 62 O.R's of "A" Section employed to carry out the work.
5. Material collected on 20-10-18 from dumps left by enemy at Carvin and along the Canal. Work commenced on 21-10-18 and completed on 24-10-18. Full particulars are given in statement attached.

Alex Sanderson
Major

Major,

C.O. 3rd Australian Tunnelling Company.

STATEMENT OF BRIDGES

ERECTED BY 3rd Australian Tunneling Coy, 5th ARMY.

APPENDIX 115

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---------------|--|---------------------------|------------------------------------|---|---|-----------------------|---|---------------------------|--|--|--|---|---|
| to fill in HQ | Place or Name of Bridge, and number of spans | Roadway on which situated | Map Reference | OVER Name or description of waterway or other gap | Description of Bridge, whether timber, R.S.I. or stock span etc. | SPAN clear opening. | Maximum load Bridge will carry on one axle. | Distrib-uted over Bridge. | Headway from water to underside of Bridge. | Maximum Structural depth from Roadway to under side of Bridge. | Description of Abutments or Bank seats. | Description of Piers, if any. | Remarks and Sketches. |
| | Meurchin 7 Spans | Wingles-Carrin Road | Sheet AA ^A H6d 75.40 | Haute Deule Canal | Timber trestle piers with Timber & R.S.I. Superstructure Stringers:- 6/6"x6" Timber 6/R.S.I. each 7/2"x3/2"x1/2" | 7 Spans 13'6" each | 7 1/2 Tons. | 50 Tons | 3'6" | 1'4" | 4 Bedlogs 18'0"x8"x8" on 9"x3"x4'0" Close Mud sills | Trestle piers comprised of 3 posts 9"x9" x 12'0" long. Outside posts splayed 1:8 Between centres of posts at cross- heads = 6'0" at sills 7'9". Crossheads:- 4/6"x15'0" Two on each side of posts. Sills:- 2/6"x6"x18'0" One on each side of posts Waling Pieces:- 2/3"x3"x15'0" Cross Braces:- Double 9"x3" x 15'0" all connected by 7/8" Bolts. Longitudinal Bracing between piers:- 3 double 5"x3" Braces 16ft Long. | Bridge built from Enemy Materials collected in the district. Traffic over bridge in 3 1/2 days after construction commenced. Average number of men employed = 62. Number of hours worked = 36. Width of roadway between kerbs = 12 feet - W.P. Table - Preparing abutments 16 men - 4 hours Making trestles 16 men - 10 hours Placing trestles:- 60 men - 8 hours Carrying:- 40 men - 20 hours. Superstructure:- 46 men - 10 hours. Longitudinal Bracing 16 men - 4 hours Repairing Roadway 20 men - 10 hours. Collecting materials:- 60 men & 3 lorries for 12 hours. Materials collected at Carrin and along Canal Bank. All bolts and dowels had to be made on the work from saved materials. Work commenced 21/10/18. Completed 24/10/18. |

Where a Bridge consists of several Spans, the Spans should be numbered and particulars filled in for each Span as a separate Bridge. Spans under 10 feet should not be shown unless a longer bridge.

Sketch plans should be given with North point shown, and each span, pier and abutment numbered to indicate to which the descriptions refer.

STATEMENT OF BRIDGES

PREPARED BY THE BRIDGE ENGINEER

APPENDIX

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-----------------|----------------|----------|--------|--------|-----------|---------|---------|---------|---------|
| Place of Bridge | Name of Bridge | Material | Span | Height | Clearance | Remarks | Remarks | Remarks | Remarks |
| Murchison | 7 spans | Timber | 100 ft | | | | | | |
| Wright-Camp | 2 spans | Timber | 100 ft | | | | | | |
| North-Camp | 2 spans | Timber | 100 ft | | | | | | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

Where a bridge consists of several spans, the spans shall be numbered and distinguished by letters in the order given as a regular bridge. Spans shall be numbered and distinguished by letters in the order given as a regular bridge.

Each span shall be given with north-point shown, and each span, first and second number to indicate to which the description refers.

----- WORKING PARTY TABLE -----

| Description of Work. | Date. | No. of O.R's employed. | | Man Hours. | Remarks. |
|---|----------|------------------------|---|------------|---|
| | | 06.00 to 11.30 | 11.30 to 17.00 | | |
| Abutments. | 19-10-18 | -- | 138 | 759 | Part of old steel bridge had to be cut away in order to fix Northern abutment. |
| | 20-10-18 | 132 | 138 | 1485 | |
| | 21-10-18 | 130 | 138 | 1474 | |
| | 22-10-18 | 130 | 136 | 1463 | |
| | 23-10-18 | 132 | (136 for (2½ hours (18 for (3 hours. | 1120 | |
| | 24-10-18 | 18 | 18 | 198 | |
| | 25-10-18 | 18 | 18 | 198 | |
| | 26-10-18 | 18 | 18 | 198 | |
| | 27-10-18 | 18 | 18 | 198 | |
| | | | | Total |  | 7085. |
| Steelwork and fixing decking, footpaths, etc. | 23-10-18 | -- | 118 for 3 hours. | 354 | Erection of steelwork was slightly delayed owing to transport not being available to bring bridge parts to site as early as required. |
| | 24-10-18 | 114 | 118 | 1276 | |
| | 25-10-18 | 114 | 118 | 1276 | |
| | 26-10-18 | 90 | 86 | 968 | |
| | 27-10-18 | 98 | 102 | 1100 | |
| | 28-10-18 | -- | 102 for 4 hours. | 408 | |
| | 29-10-18 | 62 | 60 for 4 hours. | 581 | |
| | | | Total | 5963 | |
| Fixing anchorage and erecting launching gear. | 26-10-18 | 8 | 16 | 132 | 16 men for 11 hours with transport collecting launching gear not included. |
| | 27-10-18 | 16 | 16 | 176 | |
| | | | | Total |  | 308 |
| Launching. | 28-10-18 | 60 for 2½ hours. | 60 for 1½ hours. | 240 | |
| | | | Total | 240 | |
| Dismantling launching gear. | 29-10-18 | 28 | 26 | 297 | |
| | | | Total | 297 | |
| Approaches. | 29-10-18 | 40 | 50 | 495 | |
| | 30-10-18 | 122 | 110 | 1276 | |
| | | | | Total | 1771 |

3rd Australian Tunnelling Company.

STATEMENT OF BRIDGES ERECTED BY

3rd AUSTRALIAN TUNNELLING COMPANY, FIFTH ARMY

APPENDIX 116

256

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|------------------------------|---|----------------------------|----------------|--|--|--------------------|---|--------|------------------------------------|--|--|-------------------------------|-----------------------------|
| No to be filled in by G.H.Q. | Place or Name of Bridge, and number of spans. | Roadway on which situated. | Map Reference. | OVER Name or Description of waterway or other gap. | Description of Bridge whether timber R.S.A. or steel span etc. | SPAN clear opening | Maximum load wt will carry (in tons) | Bridge | Leadway from water side of Bridge. | Maximum Structural depth from roadway to under-side of Bridge. | Description of abutments or bank seats | Description of Piers (if any) | Remarks and Sketches. |
| | PONT MAUDIT | LENS + CARVIN. | I 27a 2.3 | HAUTE DEULE canal. | "HOPKINS" 120 ft Span. | 120 feet. | Class A A for all loads. Tanks at 20 yards intervals. | Bridge | 15 Feet | 2 feet | Standard M.S. Cube piers (two Tiers) | | Sketch and report attached. |

APPENDIX II

| 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Description of items and quantity | Description of items and quantity | Description of items and quantity | Description of items and quantity | Description of items and quantity | Description of items and quantity | Description of items and quantity | Description of items and quantity | Description of items and quantity | Description of items and quantity | Description of items and quantity | Description of items and quantity | Description of items and quantity |
| | | | | | | | | | | | | |

C. Section
Investigation reports

118

Report for the 8th November

The enemy retired to the Canal bank. We went forward and recovered Papper Corkery's body. The enemy had removed all badges, pay book etc. We carried the body back to St Maur sheet 37 017.6 central & buried it erecting a wooden cross to mark the grave.

Report for 9th

Party moved forward. ~~the~~ Vernon sheet 37 W. 14 central took out four munitioners in Antoiny near the railway at V 6 C. 5. 8

356

O.C.,
3rd Australian (T) Coy.



119.

This is very gratifying; your parties are doing splendid work.

Will you enquire into particulars and put forward names for recognition if you consider fit.

Brig-General,
Chief Engineer, I Corps.

9/11/1918



C.R.E. 58th. Division EY.187.

Chief Engineer,
I Corps.

Attached copy of extract from report by Capt. Mc.ARDILL,
3rd. Australian Tunnelling Coy. is forwarded. I cannot
too heartily endorse all that Capt. Mc.ARDILL says about his
officers and men, and should like to add a special word of
appreciation of his own untiring skill and energy which
has animated all and been largely responsible for the successful
results obtained.

W. W. W. W.

Lieut. Colonel, R.E.
C.R.E. 58th. Division.

7. 11. 18.

356

C.R.E.
58th. Division.

APPENDIX

121

INVESTIGATION REPORT.

All the parties in your Division have done excellent work and I have not heard of any casualties resulting from delay action mines or "Booby traps" since they came into the area, or of any delay action mines having gone up, with the exception of one in COURRIERES whilst it was still under investigation.

Lieut. CAVANAGH and party has done consistently good work and the conduct of Sapper MORAN has already been brought to your notice.

I would like also to mention the conduct of Sappers COOK, W.R., and WILSON, J., who on the night of 30. 10. 18 rescued under heavy shell fire several wounded men of the 4th. Suffolks and 4 wounded civilians, and assisted in getting them to the A.D.S.; the unwounded men of the 4th. Suffolks had all taken shelter in cellars and did not re-appear until COOK and WILSON⁵/₈ got them out to assist in carrying the wounded to the Dressing Station.

(sd) J.O. Mc. ARDELL,
Capt. R.E.

3rd. Australian Tunnelling Coy. R.E.

6. 11. 18.

Commanding
3rd Austⁿ Inf Bn

Det. 100th Coy
415 A.

Please forward a
copy of the authority
posting Ser W. J. Gray, CF
to your unit and
certify that a commu-
nication set has not previously
been issued to him.

CHARGE OFFICER,
1 CORPS TROOPS.
23/11.

~~Added~~
Murray
as Corp Troop

356

Attention is specially directed
to the importance of this
Pamphlet.

[E.-in-C. Fieldwork Notes No. 59.

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1114/1
4.11.18

GERMAN TRAPS AND MINES.

(Revised to 29th September, 1918.)

GERMAN TRAPS AND MINES.

(Revised to 29th September, 1918.)

1. When reconnoitring ground evacuated by the Germans for traps and land mines, the greatest care must be taken. A cursory examination is not sufficient, as the mines are often extremely well concealed. On several occasions, after obvious traps had been removed from dug-outs, delay action charges exploded which had not been previously detected.

2. The following should be regarded with special suspicion until investigation has been carried out by experts:—

Attractively furnished dug-outs.

Dug-outs under roads or railways, especially near cross roads.

Single houses left standing when others have been destroyed.

All new work, or new trench or other equipment in the midst of weatherworn ground or articles: *e.g.*, recently disturbed soil, new metalling, new trench boards, new timber in dug-outs.

Souvenirs, such as helmets, shells, badges and bayonets, left in conspicuous positions.

Articles sticking in the ground, such as stick grenades or shovels.

Wire obstacles across roads and tracks.

Piles of boxes in ammunition dumps.

Heaps of coal or road metal, etc.

3. German traps and mines may be classified under the following heads, according to the nature of their firing arrangements:—

(a) *Delay action fuzes.*—The action of these fuzes depends upon the eating away of a wire by a corrosive solution. The "delay" may be any time up to one month or even longer; fourteen days appears to be the usual period. At least four types of corrosive liquid have been found, which are at present under test. Two known designs of fuze are shown on Plates I. and II. These fuzes are absolutely silent and require no connections outside the charge. New work, or signs of the ground having been disturbed will probably be the only indications of their presence.

(b) *Clockwork Devices.*—These are of complicated manufacture, and will probably rarely be met with. They may possibly be discovered by the ticking. One case has been reported where the running-down of the weight of a grandfather clock was used to complete an electrical circuit.

(c) *Percussion and friction devices.*—The percussion device may be set in action by treading or pressing on a board hidden under the earth, by pressing against a railing, etc., when either a safety-pin will be withdrawn, releasing the spring of a spring lighter (*see* Plate IV., Fig. 5), or a striker may be driven into a detonator. Friction devices are actuated in a similar manner (*see* Plate III.). They may also be actuated by trip wires or wires connecting the charge with souvenirs, grenades sticking in the ground, ammunition boxes, etc., as described above in para. 2. Combinations of both percussion and friction devices have been reported.

(d) *Electrical devices* will naturally depend on a pull of a wire or pressure on some article completing a circuit.

(e) *Mines fired electrically from a distance.*—This method is chiefly applicable to bridges and billets used as headquarters, where telephone wires can be utilised for the firing circuits. These mines can be fired at will by the enemy at any moment, so long as the wires remain uncut. The Hindenburg Tunnel, north of Bullecourt, was arranged for demolition in 1917 by this method. As a rule, suspicious wires should be cut at once; but care must be taken not to cut taut wires (these may be found mixed up with slack telephone wires), as they may be simply supporting a weight which, if the wire is severed, will drop on and ignite a detonator. Wires, if cut, should not be pulled out, but the cut ends should be turned away from each other and carefully marked, both ends of each wire alike, so that experts, when they arrive, can investigate, trace and remove the charge.

4. *Charges.*—The charges may be Perdit, Donarit, Westphalit, or other German explosive, or they may be composed of bombs, shells (both H.E. and gas), and trench mortar shells. In the case of shells, the fuze is removed and a detonator inserted, connected to one of the firing devices described in para. 3. It is probable that a considerable number of ordinary demolition charges and shells may be found which have either never been fired or in which the fuze has failed. These, particularly gas shells, are often arranged for hasty firing, in the event of an attack, by pulling a wire or string; consequently they are dangerous in inexperienced hands and should be dealt with by experts.

5. *Examples of Traps.*

(a) *Land Mines.*—(i.) *In Roads and Railways.*—These consist of wooden or metal boxes, arranged to function on pressure being applied (*see* Plates IV., V. and VI.). They are usually concealed as filled-in shell holes. In some cases not only is the road mined,

but also likely deviations and cross-country tracks. In some cases each charge in a mine-field has been indicated by a small peg which has not been removed by the enemy. Two principal varieties exist: one designed for tanks or heavy traffic, provided with some form of shearing wire, and the second, without shearing wire, which is liable to be set off even by a man walking over it.

(ii.) In Trenches.—Any of the ordinary land mines can be laid in trenches. A special device is shown in Plate V., Fig. 3.

(iii.) In Horse Standings, Brick Floors, etc. One of the bricks may be removed and a land mine arranged underneath. Loose bricking or fresh mortar should always be regarded with suspicion.

(b) *Dug-outs*.—In entrances to dug-outs charges are often laid below a thin false board which, when trodden on, forces a spike into a detonator. Any obstruction in the entrance to a dug-out should be regarded with suspicion, such as branches, wires, timber, boxes on the steps, etc. Articles, such as shovels, stuck inside a dug-out in the timbers, and any loose articles lying about in dug-outs, such as stovepipes and small souvenirs, should be carefully examined. Boxes of explosives have been found fitted with a friction lighter, the loop of which was nailed to the floor (see Plate III.). Handrails on the steps of dug-outs may be attached by wires to a charge. Charges placed behind the timbering may be detected by displaced or new timbering; and with mortice and tenon casing, by the absence of the wedge in the ground sill. Where possible, the surface of the ground above a dug-out should also be examined, as charges may be placed in position from above. Blown in entrances to dug-outs are not always safe; charges may be concealed below them. Seeming dead ends of galleries have been found with large charges behind them, the working face being made to look like undisturbed ground—even to the extent of pick marks.

(c) *Bridges*.—Charges should be looked for on the bridge and in the abutments. Even when a bridge has been blown the abutments may still contain delay action charges.

(d) *Dumps*.

(i.) *Ammunition Dumps*.—Boxes may be arranged to fire charges on being opened or lifted; any box which shows signs of having been opened should be carefully examined. Attention is drawn to Plate II., 1917 Long Delay Action Fuze. One shell in a stack may be fitted with this fuze; it is possible that the fuze may be identified by the absence of the punchmarks or cement which maintains the fuze in position.

(ii.) *R.E. Dumps*.—The top pieces in dumps and stacks of timber, rails, etc., may be arranged to fire a charge on being moved. In one case a charge was buried in a heap of stones, the firing device being attached to a log of wood lying on the top of the heap.

(e) *Miscellaneous Traps*.—Explosive may be placed in coal dumps, and in the chimneys of fire-places and stoves, with a view to ignition when the fire is lighted.

Trip wires may be arranged in various ways. Barbed wire obstacles across roads must be carefully examined before removal.

Entrances and doors of any shelters, dug-outs and houses must be opened with caution; a percussion or friction device may be attached.

Books and other articles left on tables, pictures and mirrors on walls, etc., should be examined before being lifted.

Bathing places have been found with pointed stakes and barbed wire arranged below water level.

The body of a British soldier was found with a percussion device attached by wire to the wrist; and even in a dressing station have been so arranged that, after the wounded have been withdrawn by us, the movement of a dead body may fire a charge.

(f) *Power Plants*.—The Bellenglise Tunnel was arranged for electric lighting by a large power plant. German electricians refused to close a certain switch, necessary for restarting the plant, as it would also have fired a series of mines.

6. *General Hints*.—Disturbed or settled ground is readily detected after rain. Depression of the surface after the passage of traffic may indicate the presence of a chamber below.

Explosive wrappings and loose powder may indicate hidden charges. Suspicious places in soft ground can be investigated with a probe. The German explosives are all hygroscopic.

Explosive charges when found should be saturated with water until experts arrive to remove them.

Appendix I.

GERMAN TRAPS.

From First French Army Bulletin 175, 20-9-18.

The following arrangement was discovered in an enemy ammunition dump north-east of Aubigny, containing more than a thousand Minenwerfer shells.

The shells were arranged in heaps of sixty, about 10 yards apart.

In every heap, the plugs of several shells had been removed and replaced by a pétard of cheddite, covered with a viscous blackish compound impregnated with acid. In this compound were stuck some copper detonators. The heaps were connected together by a row of bombs fused in the same manner.

Part of the envelope of the detonators had already been partly eaten by acid. If the corrosion had been complete, the fulminate would have had no protection and the least friction or shock would have led to the dump exploding.

To render the trap harmless, remove the detonators. Ninety were actually taken out.

Appendix II.

FORTRESS CONTACT MINE.

From a captured German Manual (undated).

Description.—The arrangement of the mine will be seen from Plate IX. It consists of a cast iron box divided by a wooden partition into two chambers; for the firing apparatus and for the charge. It has a light domed tin cover (Fig. 1), fastened down by screws.

The cover will support 10 inches of damp earth, but if a heavier load—weight of a man stepping on it—is applied it will bulge in, and then presses on one or more of the 4 contact pushes. These are fastened on a wooden cover and electrically connected together. The firing chamber contains a battery and switchboard (Fig. 2). The leads pass through the partition to an electric fuze in the charge chamber.

If when the mine is set one of the contact pushes *D* (see Fig. 2) is pressed, the current goes from the battery *B* to terminal *b*—connecting bar *K 2*—terminal *c*—fuze *Z*—terminal *d*—button *D*—terminal *a*—back to the battery and fires the mine.

Safety Device.—The safety device is a bolt with cable attached (Fig. 3). This bolt consists of an outer core *g* and an inner core *h*, insulated one from the other. The cable contains two insulated wires, *e* and *f*, connected respectively to *g* and *h*.

When the safety bolt is introduced into the switch (see Fig. 4), by raising the connecting bar *K 2* the battery is cut out, so that the mine cannot be fired. At the same time a short circuit is introduced between *K 2* and *K 3*, which makes it impossible for the fuze to fire even if the circuit is closed.

The unintentional withdrawal of the safety bolt is prevented by a safety pin (see Fig. 1).

To set the mine, withdraw the safety pin and pull out the safety bolt by means of the cable.

The leads *e* and *f* in the cable are for testing purposes, both in store and after laying the mine. If by any accident a contact button has been depressed, so that the mine would fire directly the safety bolt is withdrawn, the needle of the galvanometer will be deflected when a test is made. If the mine is in order there will be no deflection. The end of the cable is marked by a small red flag.

The hole where the safety bolt is inserted has a cover (like a key-hole cover), well greased, so as to prevent moisture entering after the bolt has been withdrawn.

For transport, a steel cover, to fit over the tin cover, is provided.

To render harmless.—Unscrew the zinc cover with care, then unscrew the wooden cover on which are the contact pushes, cut the leads to the battery, etc.

Appendix III.

ARRANGEMENT OF ENEMY TANK MINES.

(Plates IV., V., VI. and VII.)

These mines will very likely be fired (and have been fired) by horse vehicles, particularly artillery, passing over them.

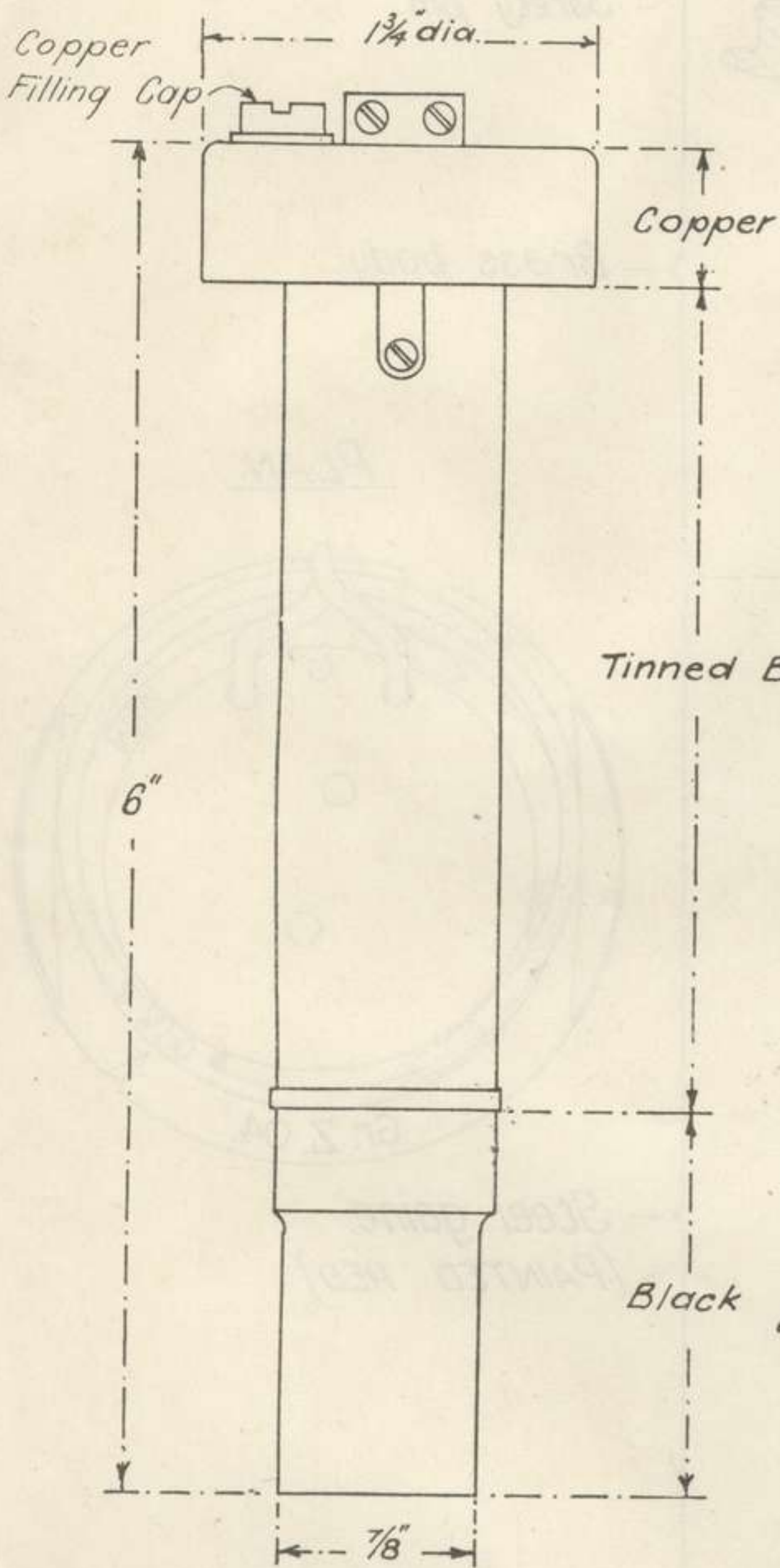
Directions of R.E. on the spot should be followed, as firing of the mines may involve the blocking of the road for a considerable time.

The mines were roughly 9 inches below the surface. Those on the road were under the wire; those on the side were carefully camouflaged with sods.

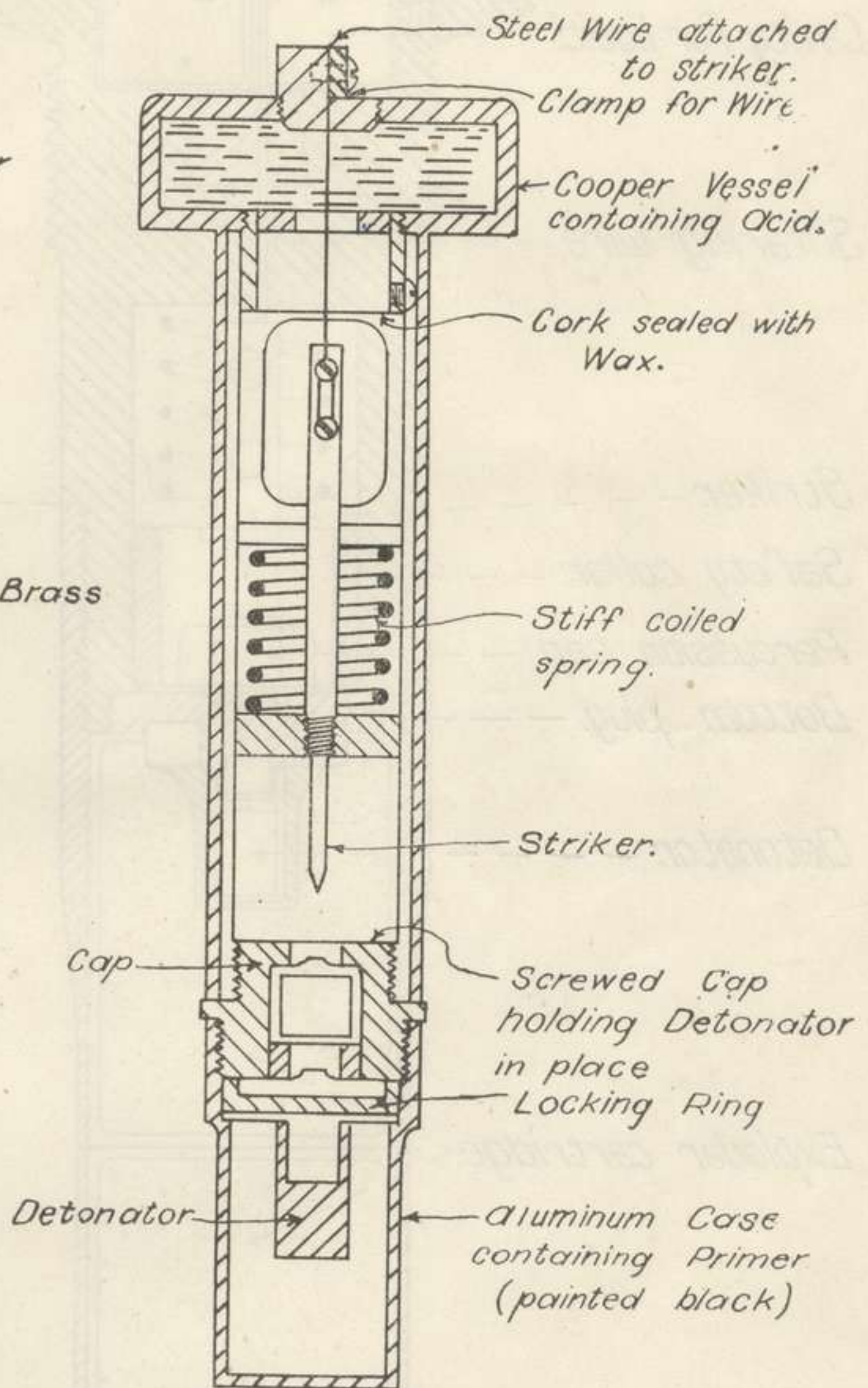
Sufficient room was left at points for passage of light traffic as at A. Plate VIII., Fig. 2.

DELAY ACTION DEVICE.

USED IN CONNECTION WITH EXPLOSIVE CHARGES LEFT IN DUG-OUTS, BILLETS & ELSEWHERE.

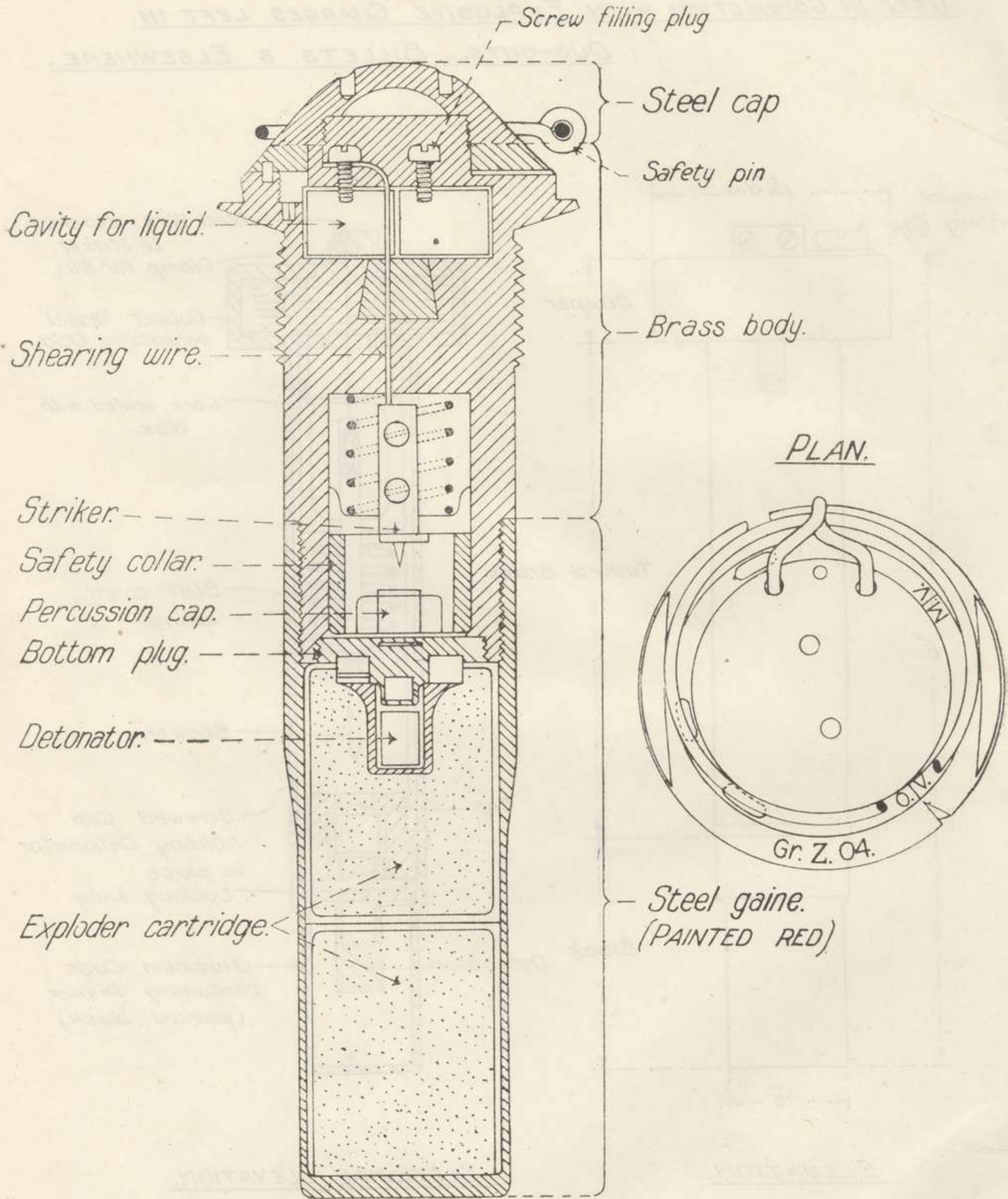


ELEVATION.



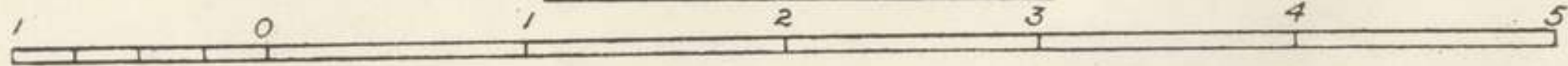
SECTIONAL ELEVATION.

THE 1917 GERMAN LONG DELAY ACTION FUZE FOR DEMOLITION PURPOSES.



SECTION

SCALE OF INCHES.



This fuze, screwed into an ordinary H.E. shell, is intended for destroying guns, battery positions, dug-outs, etc., or to blow up ammunition dumps abandoned to the enemy.

Description.—The mechanism is the same as that of the "German Automatic Detonating Device," described in Ia/31532 of the 5th April, 1917, that is, it depends on the action of a corrosive liquid eating through a wire. The fuze contains a detonator and an exploder charge.

It differs in appearance from the "Device," which was about 6 inches long and 1 inch in diameter, with a head $1\frac{3}{4}$ inches in diameter, and was painted black, in being exactly similar outside to the Gr. Z. 04 gun fuze ($8\frac{1}{4}$ inches long and over $1\frac{1}{2}$ inches in diameter, usually used with the 10-cm. gun, 15-cm. and 21-cm. howitzers, and not used in any field artillery shell); with the difference that **the gaine of the demolition fuze is painted red** and that of the gun fuze lacquered blue.

Means of recognition.—The fuze, when in a shell, being marked like the gun fuze Gr. Z. 04, cannot, as the gaine is concealed, be distinguished from an ordinary fuze.

All German shell, however, are issued fuzed. To prevent the fuze working loose, its lower edge is stabbed with a centre punch (usually in four or six places) into corresponding nicks in the top of the shell; or else, as in gas shell, the fuze is set in cement. The absence, therefore, of punch marks on the edge of the fuze, and of cement, may give an indication of the presence of a demolition fuze.

Removal.—The fuze can be screwed in by hand, and, therefore, may be removable in the same manner, but can be removed by an adjustable spanner, as there are two flats on it.

If the fuze has been stabbed, a small hand drill will also be required.

Delay.—The fuze, by using different tubes of corrosive liquid, may be set for 1, 2, 24 or 72 hours delay.

Packing.—The fuzes are packed two together in a special box. On the label in red is:—

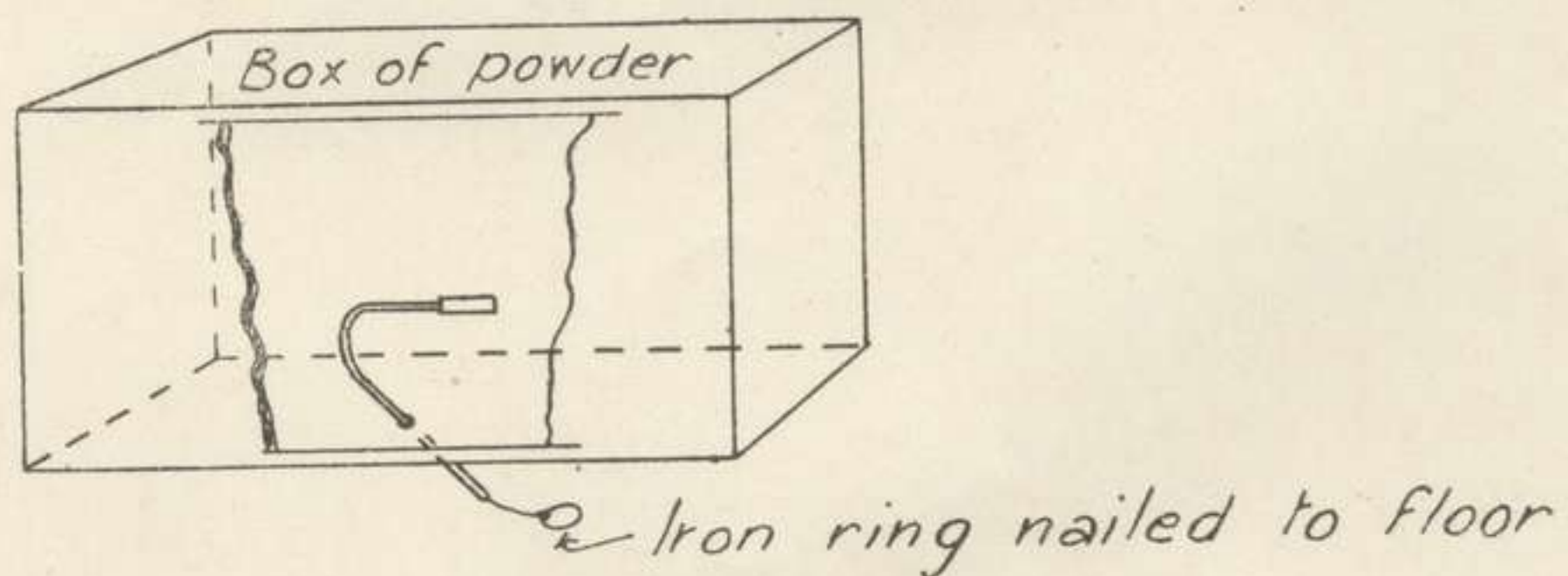
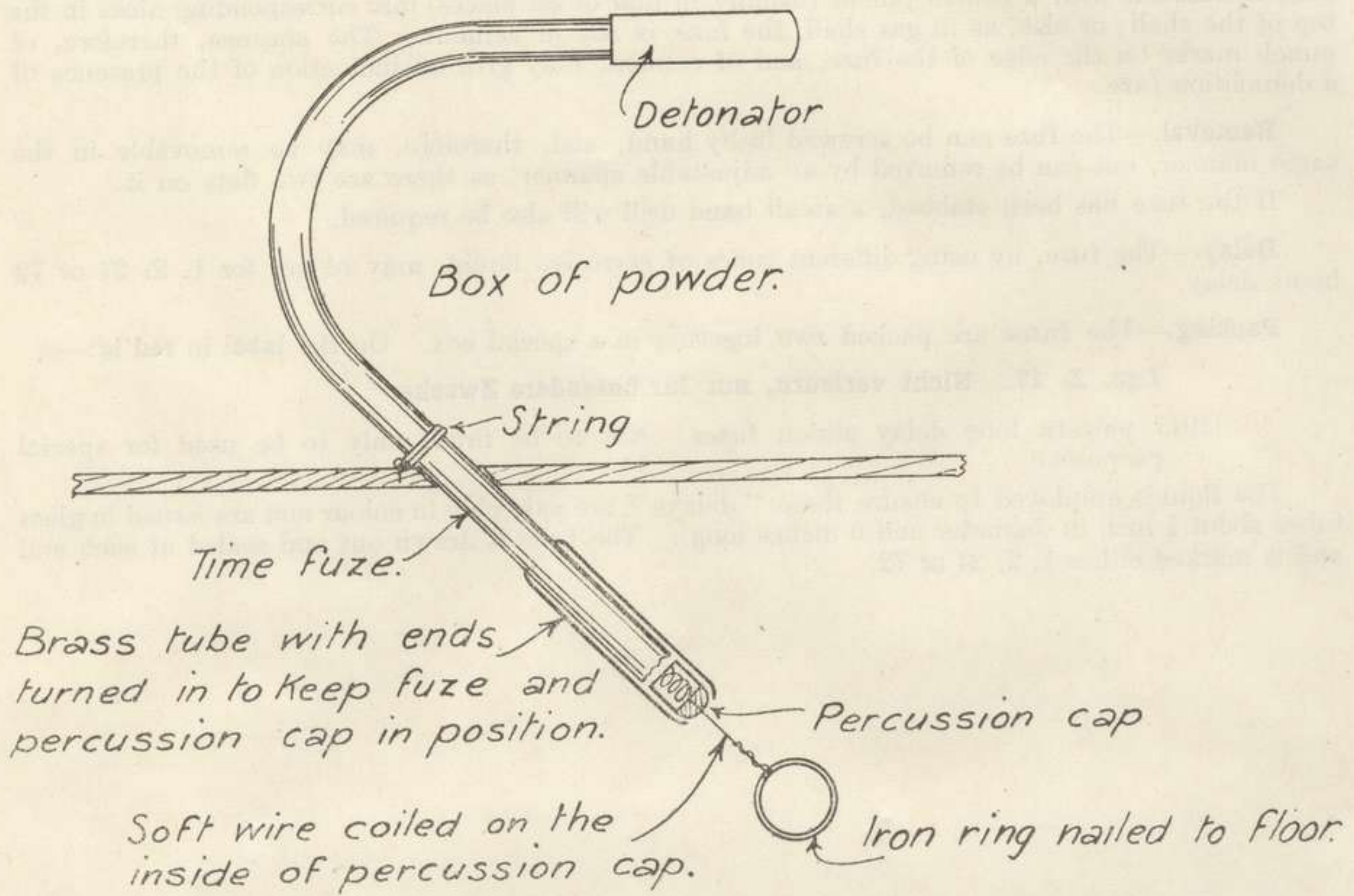
Lgz. Z. 17. Nicht verfeuern, nur für besondere Zwecke.

(1917 pattern long delay action fuzes. Not to be fired; only to be used for special purposes).

The liquids employed to ensure these "delays" are pale blue in colour and are issued in glass tubes about $\frac{3}{8}$ inch in diameter and 6 inches long. The tube is drawn out and sealed at each end and is marked either 1, 2, 24 or 72.



BOX TRAP.



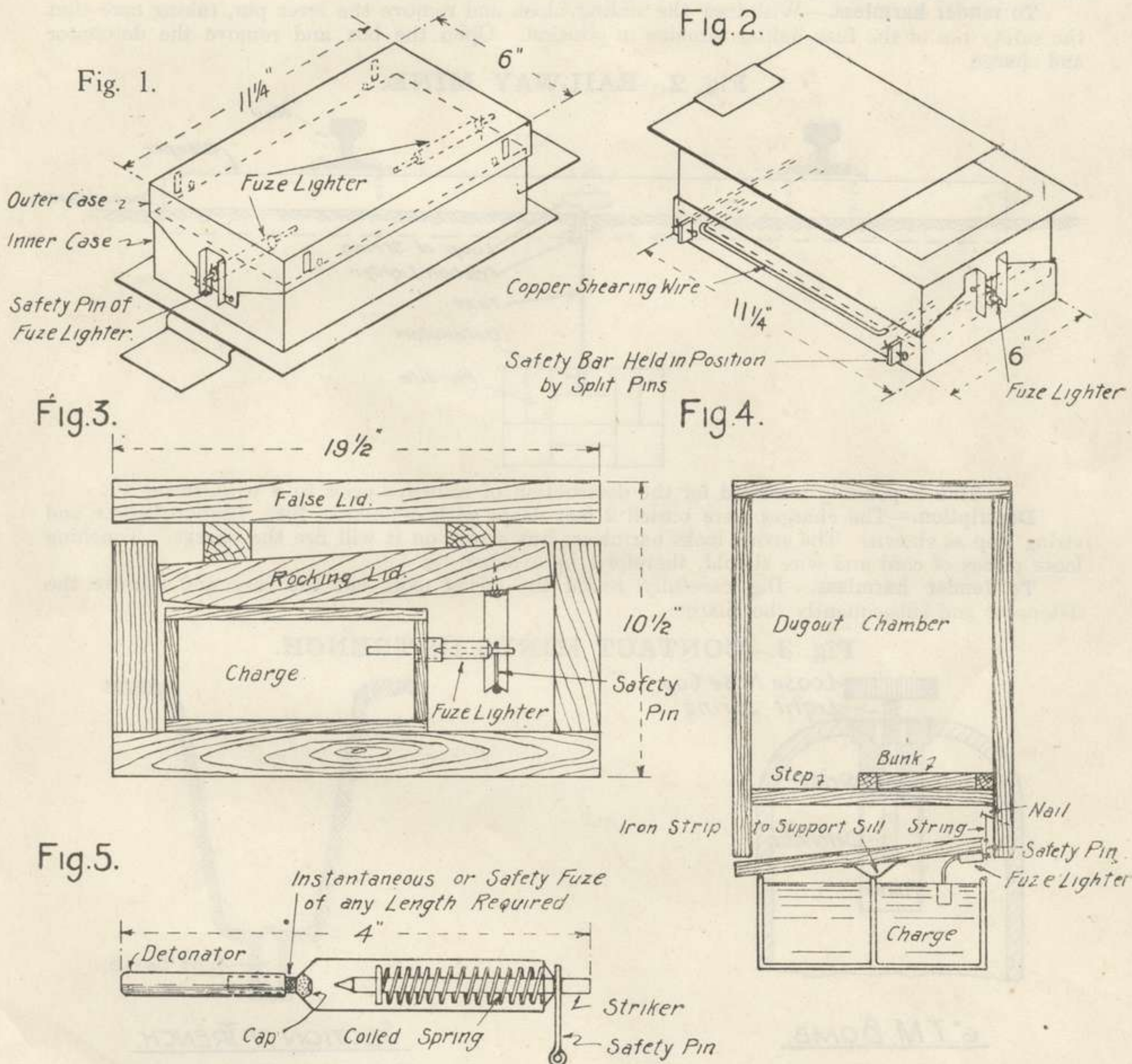
80 lb. box of Perdite was found lying horizontally on floor of dug-out. A fuze passed through a hole in bottom of box and fastened to end of fuze was a friction cap lighter, the ring of which was nailed to the floor of the dug-out.

Any movement of the box would have caused friction lighter to ignite safety fuze.

Fuze was the ordinary time fuze.

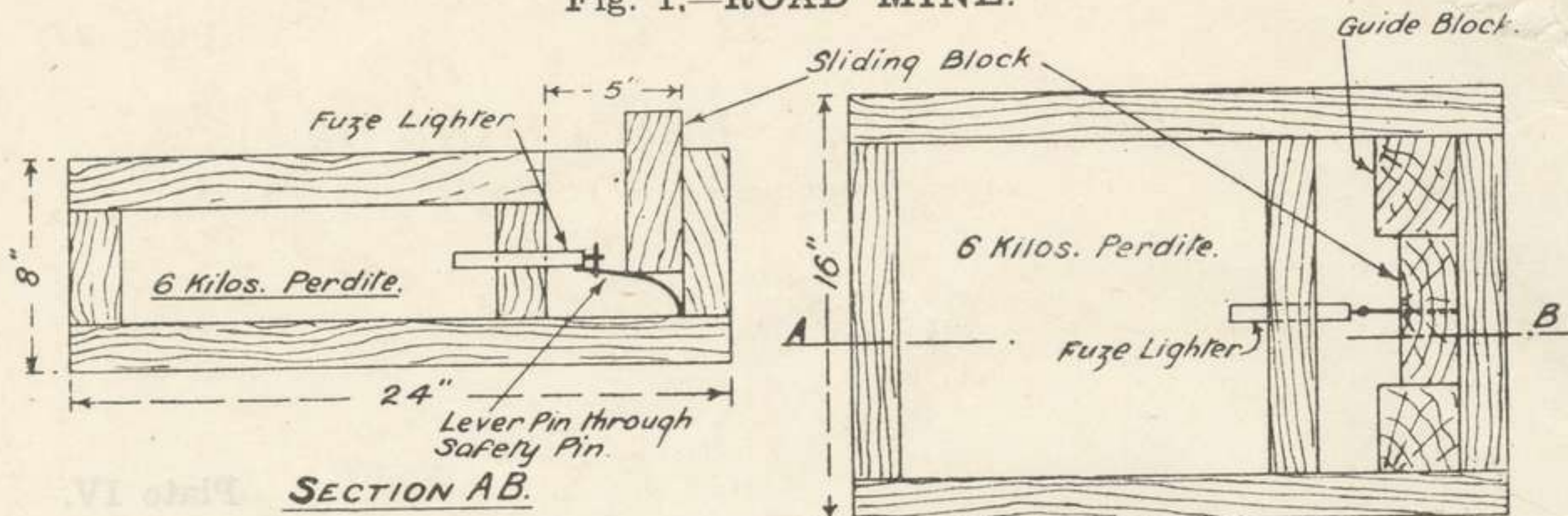
Plate IV.

ANTI-TANK AND LAND MINES.



GERMAN FUZE LIGHTER.
Standard Pattern

Fig. 1.—ROAD MINE.



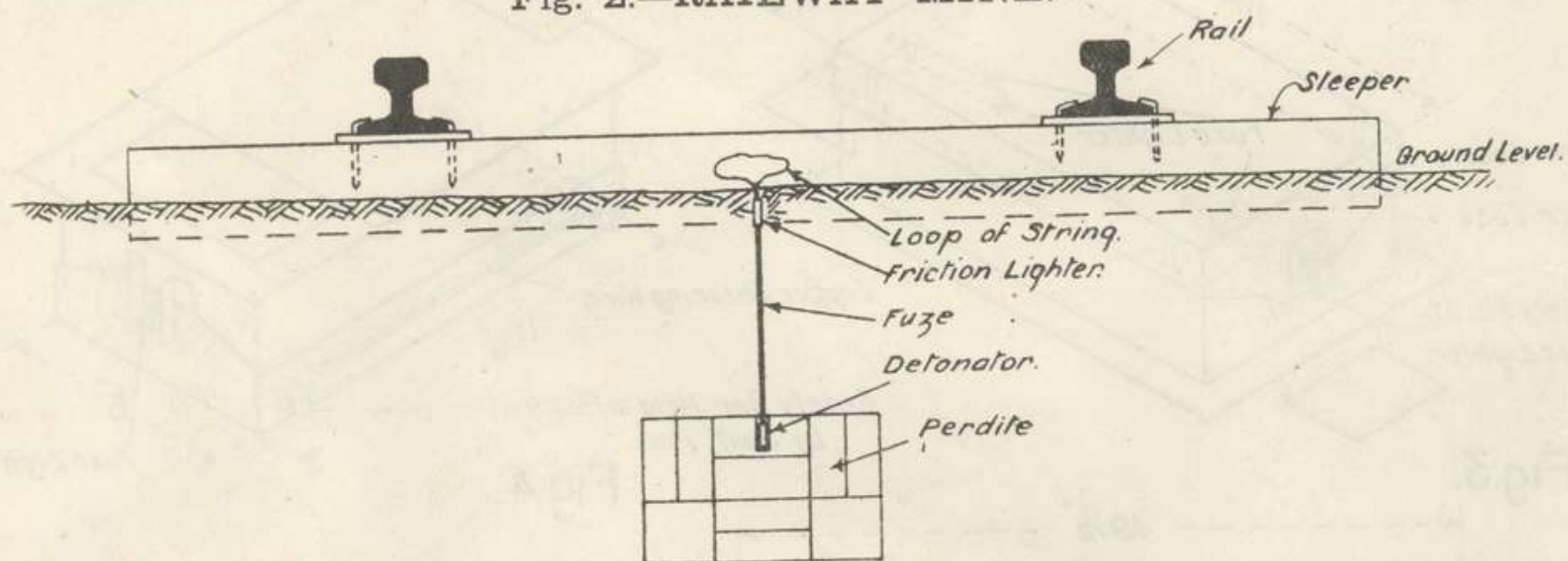
Box made of forest boarding 2"

PLAN

Description.—This type is similar to the mines described in Ia/54976; pressure on the sliding block withdraws the safety pin of the fuze lighter and fires the mine.

To render harmless.—Withdraw the sliding block and remove the lever pin, taking care that the safety pin of the fuze lighter remains in position. Open the box and remove the detonator and charge.

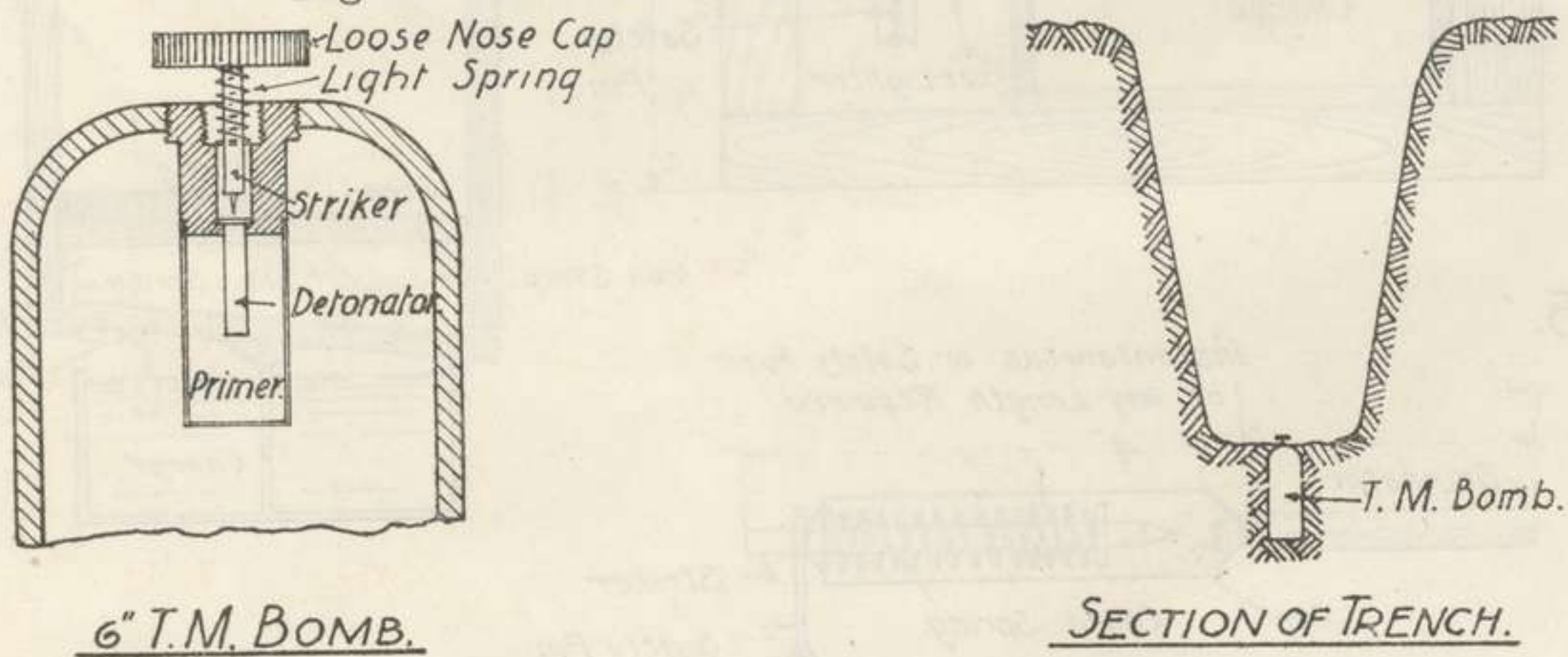
Fig. 2.—RAILWAY MINE.



This is possibly intended for the destruction of railways prior to a withdrawal. **Description.**—The charges were buried 2 feet deep, with detonator, fuze, friction lighter and string loop as shown. The string looks harmless, but a pull on it will fire the charge. Touching loose pieces of cord and wire should, therefore, be avoided.

To render harmless.—Dig carefully round the string loop, cut the fuze and remove the detonator and subsequently the charge.

Fig. 3.—CONTACT MINES IN TRENCH.



6" T.M. BOMB.

SECTION OF TRENCH.

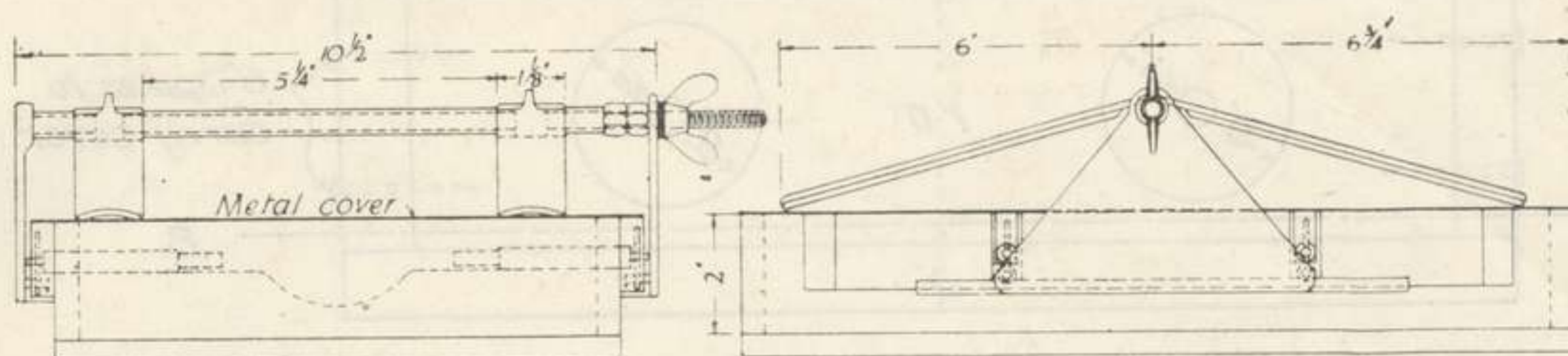
PLAN.

Description.—Fifteen 6-inch trench mortar bombs were found in the bottom of a trench. They were 4 feet apart and only just visible. The fifth and tenth bombs had a loose nose cap as shown in the sketch. The others had no special fitting. The striker in the loose nose cap was supported by a very light spring, and any pressure on it would fire it. The explosion would probably fire the other bombs. There were no duck-boards in the trench

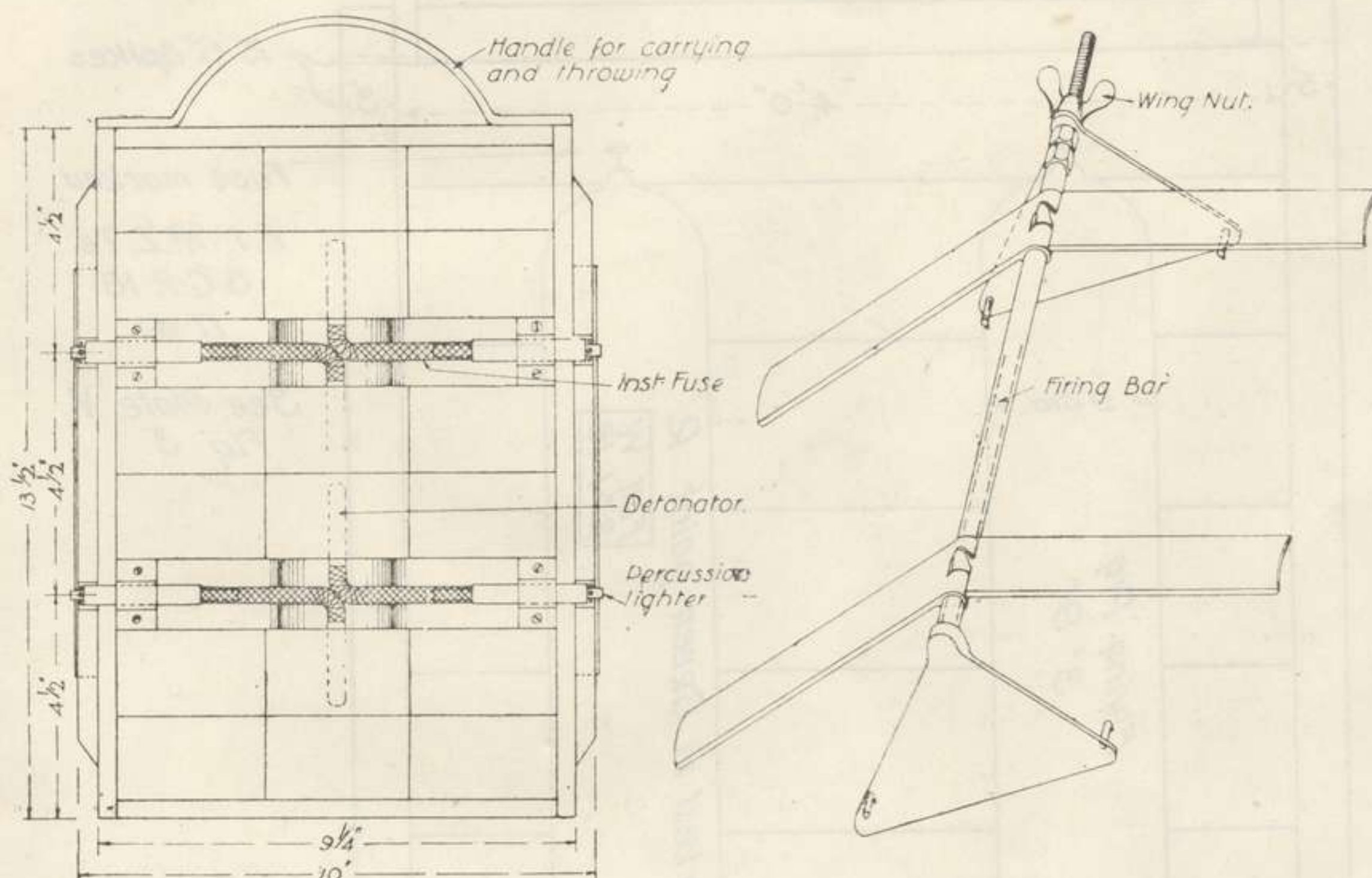
To render harmless.—Withdraw the loose nose caps, and remove the bombs.

ANTI-TANK MINE ("FLACHMINE 17").

[FROM CAPTURED DOCUMENTS DATED 18-5-18].

END ELEVATION.
Showing Bridge

SIDE ELEVATION.



PLAN, WITH METAL COVER REMOVED

SKETCH OF BRIDGE.

Description.—This mine consists of a wooden box, 8 by 12 inches, and 2 inches deep, all inside measurements, with a tin cover. On the top of the box is a firing bar with four legs, secured as described below and also by wire not shown in the sketch. The mine is painted and camouflaged to suit the ground. It can be either laid out beforehand or thrown when required by means of a handle. It weighs about 12 lbs. and contains 7½ lbs. of explosive.

Firing arrangement.—The firing arrangement consists of 4 spring percussion lighters, of the usual type, that is, they are fired on the withdrawal of a safety pin. They are connected by instantaneous fuze to detonators.

The firing bar has attached to it two metal triangles on the lower edge of which are two studs which, when the bar is placed in position, fit into the rings in the head of the safety pins of the percussion lighters, through holes in the tin covering on the sides of the box. This tin cover acts as a safety cover to the lighters.

When a weight passes over the firing bar, the safety pins of one or more of the lighters are drawn and the mine fires.

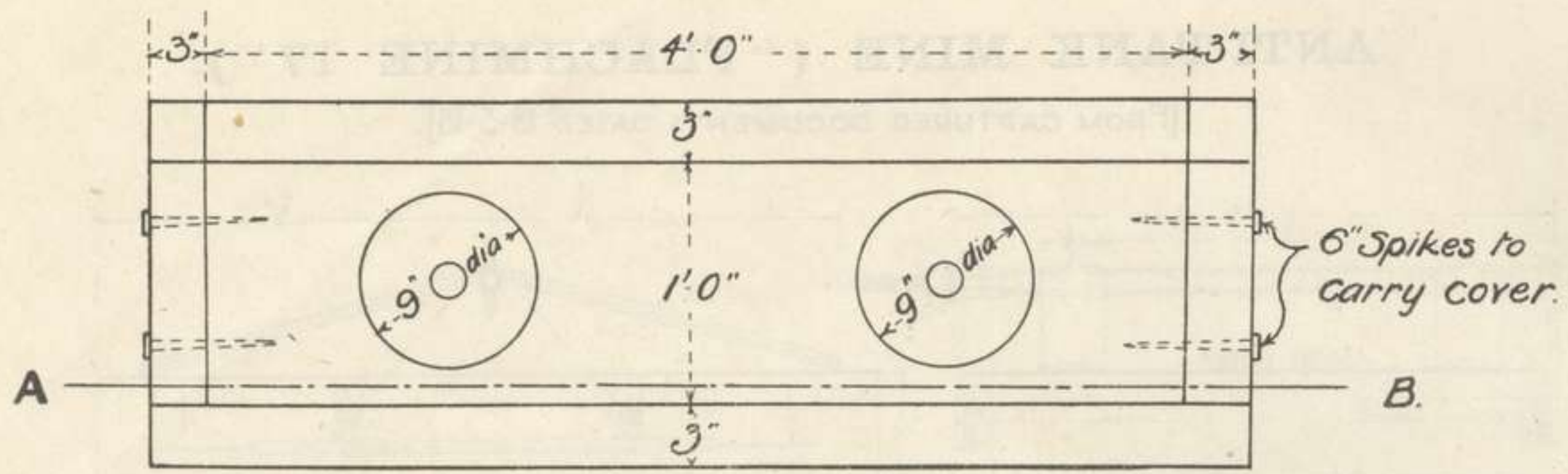
Sensitiveness.—It is stated that the mines when ready for use can be handled without danger. They have been thrown about with impunity. They are not sensitive to blows and only fire when a heavy weight presses on them. A 9-cwt. roller run over a mine fired it.

To render harmless.—Unfasten the wire (if any) securing the firing bar, and unscrew the wing nut. Then carefully remove the bar by withdrawing first one and then the other of the two metal triangles on it from contact with the percussion lighters.

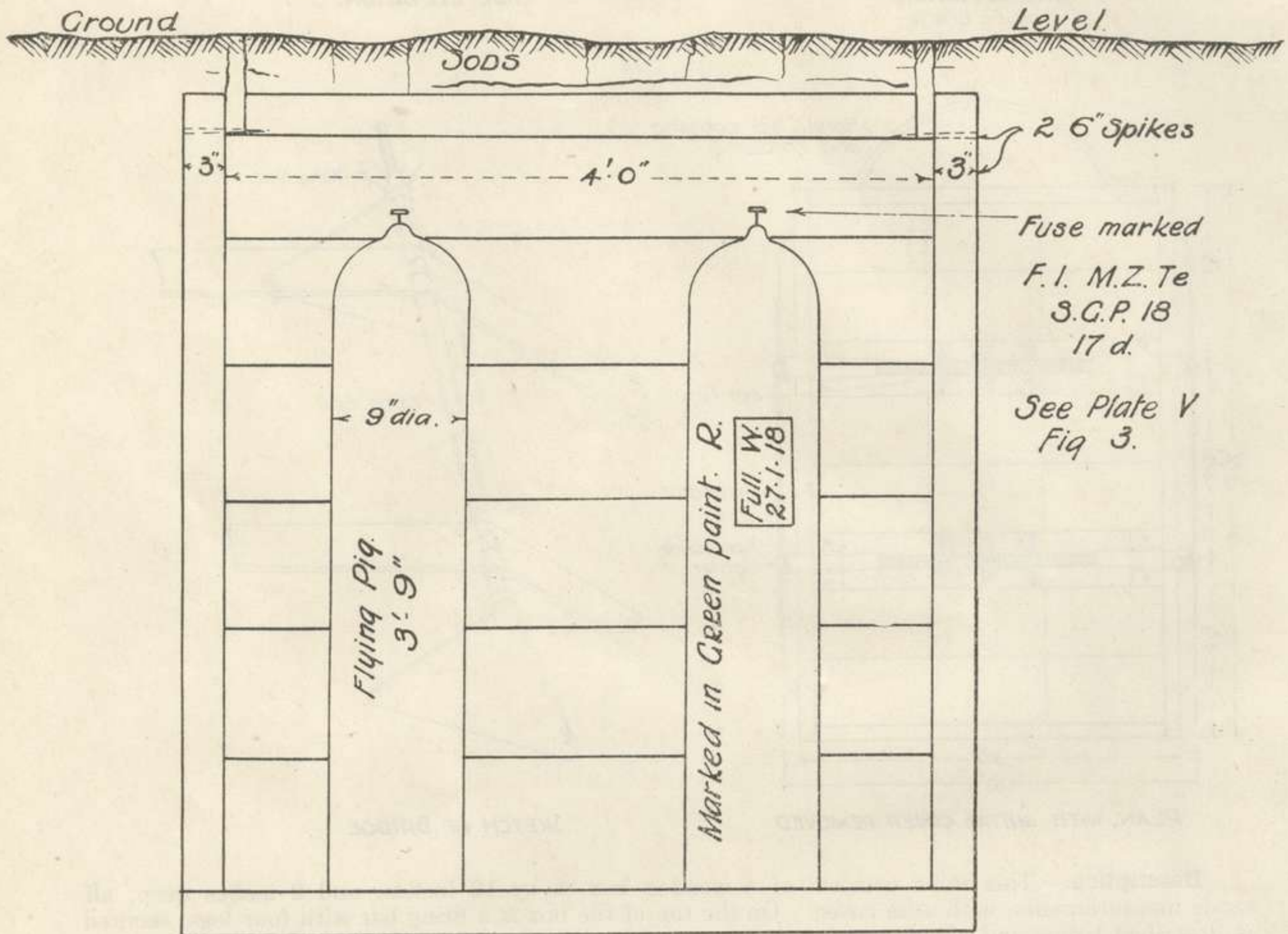
Remove the tin cover, which is screwed to the box, cut each piece of instantaneous fuze, and pull out the detonators.

The lighters can be removed by unscrewing the staples which hold them in position.

ROAD MINE.



PLAN (WITH COVER REMOVED.)



CROSS SECTION THROUGH A.B.

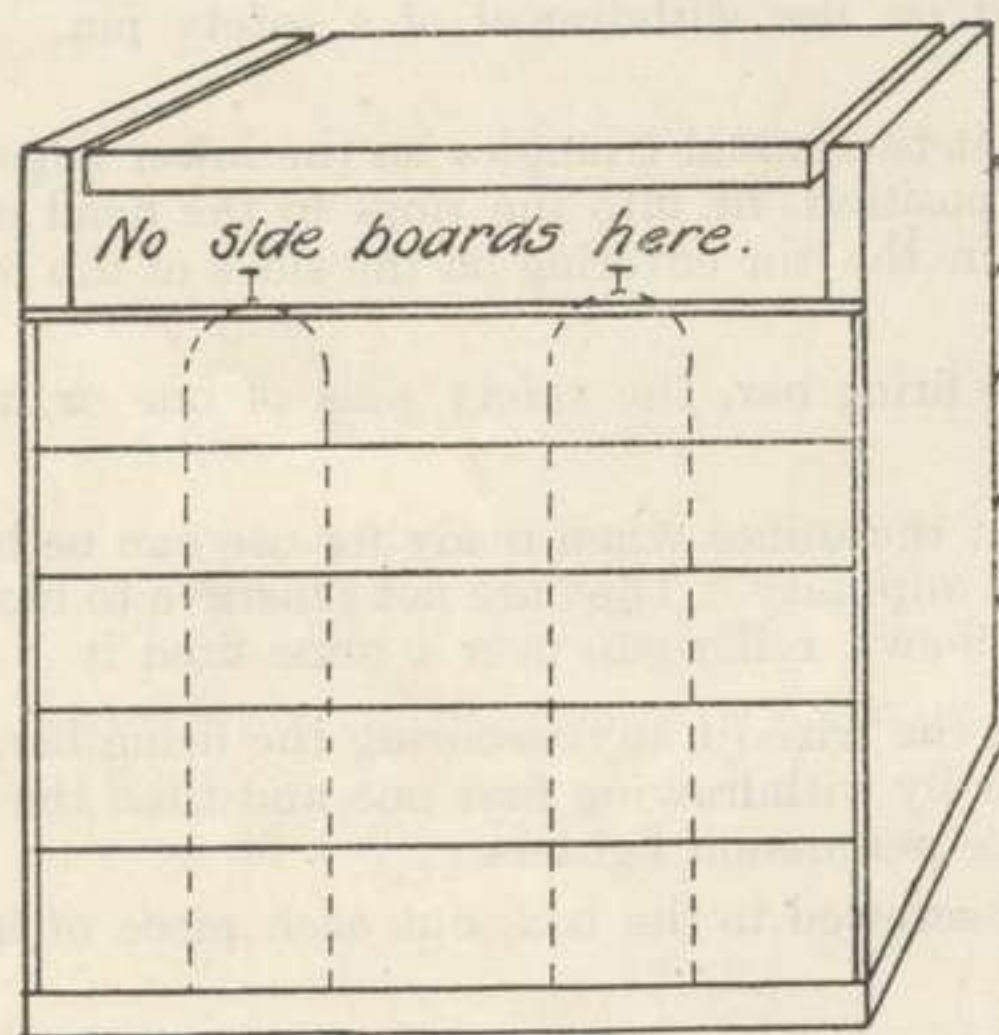


Fig. 1

TRENCH BOARD TRAP.

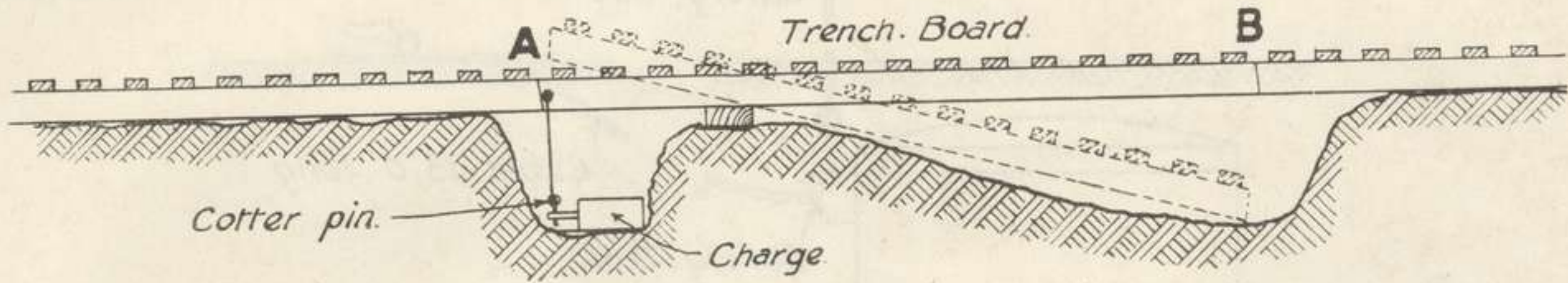
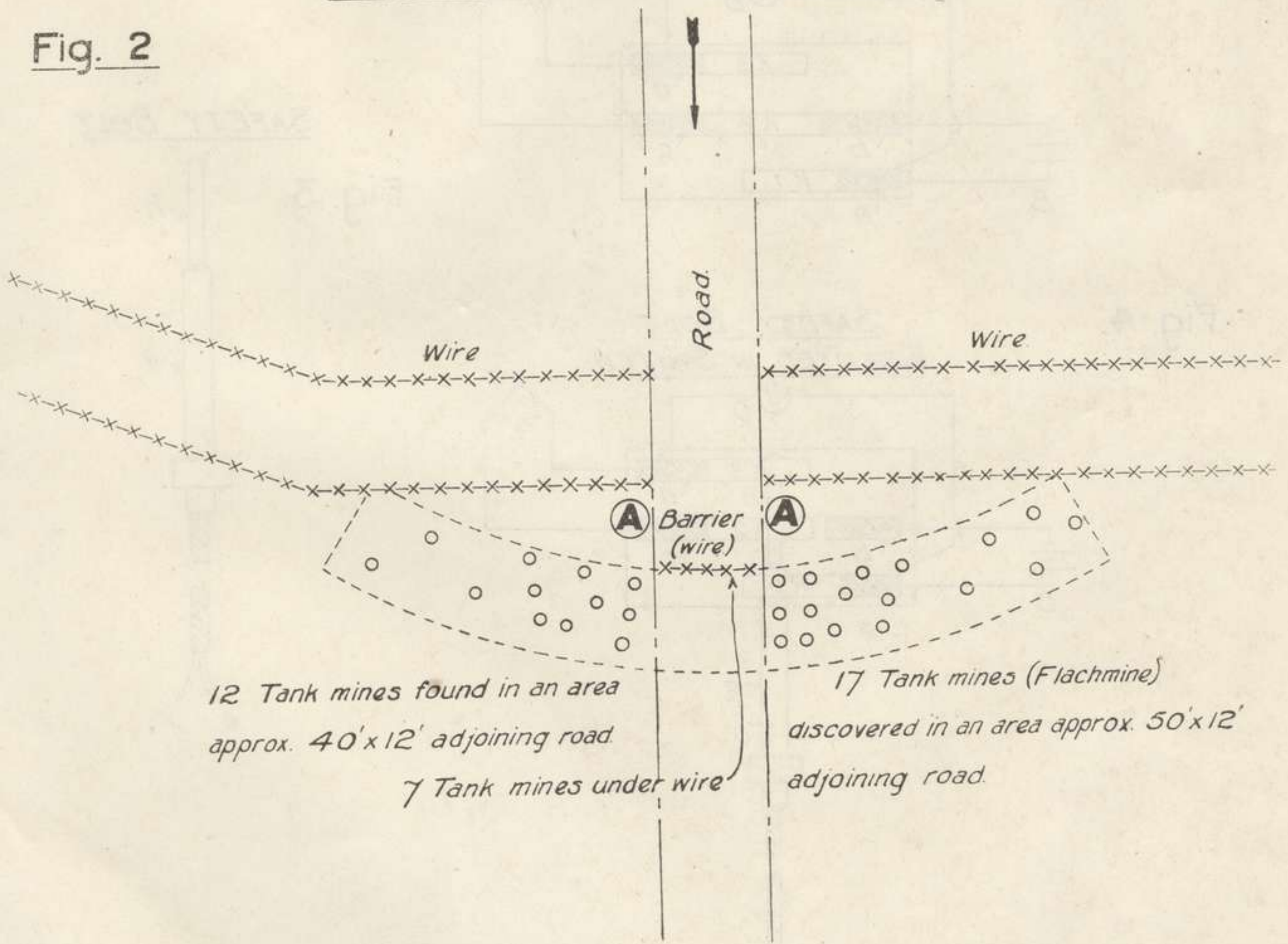


Fig. 2

ARRANGEMENT OF ENEMY TANK MINES.



FORTRESS CONTACT MINE.

Fig. 1.

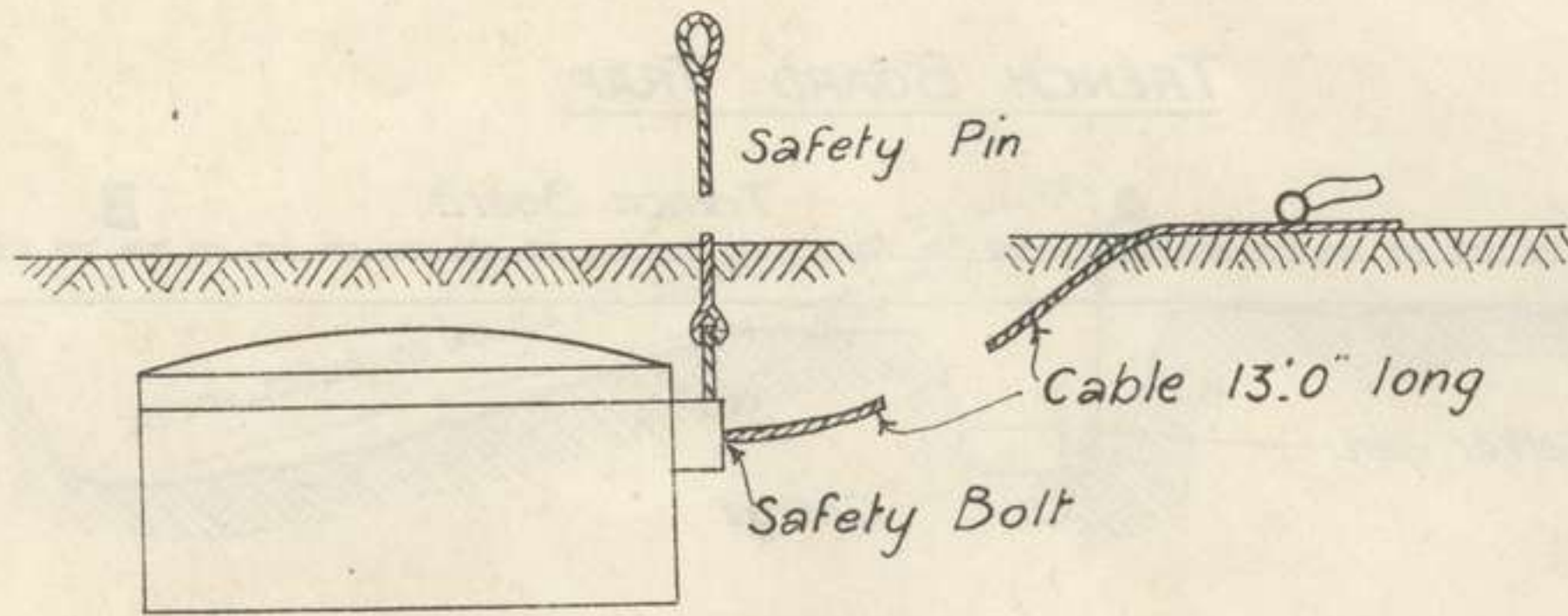


Fig. 2.

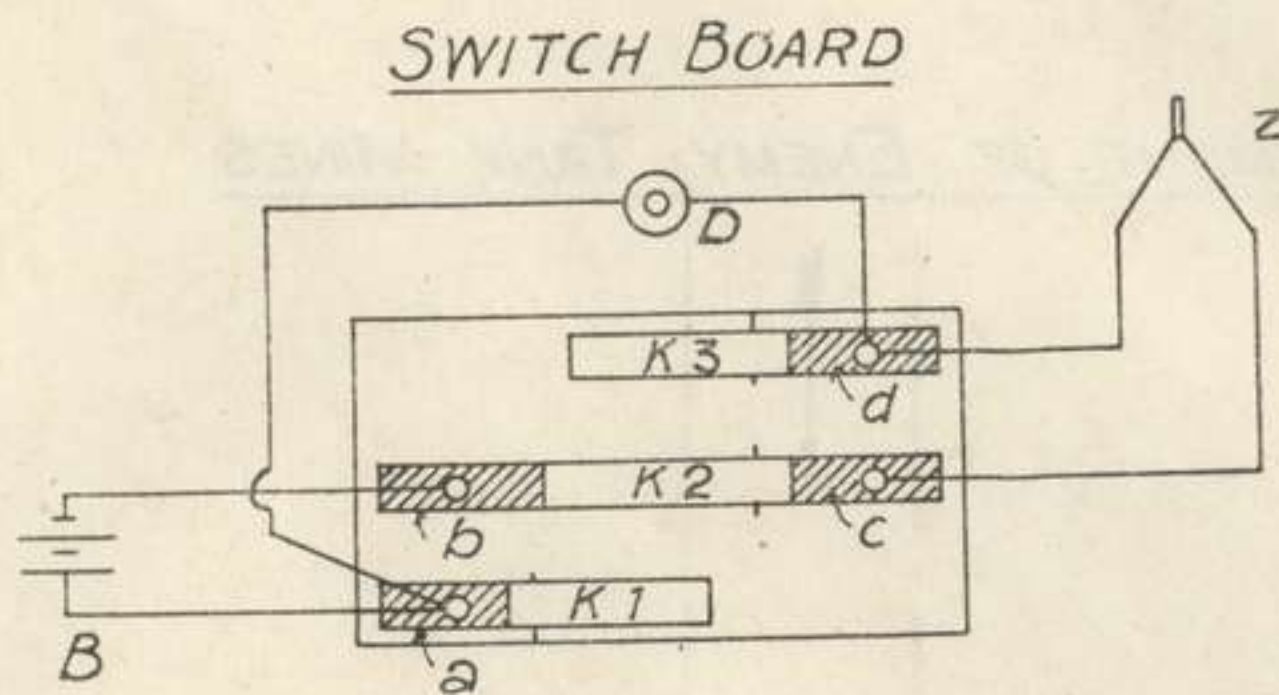
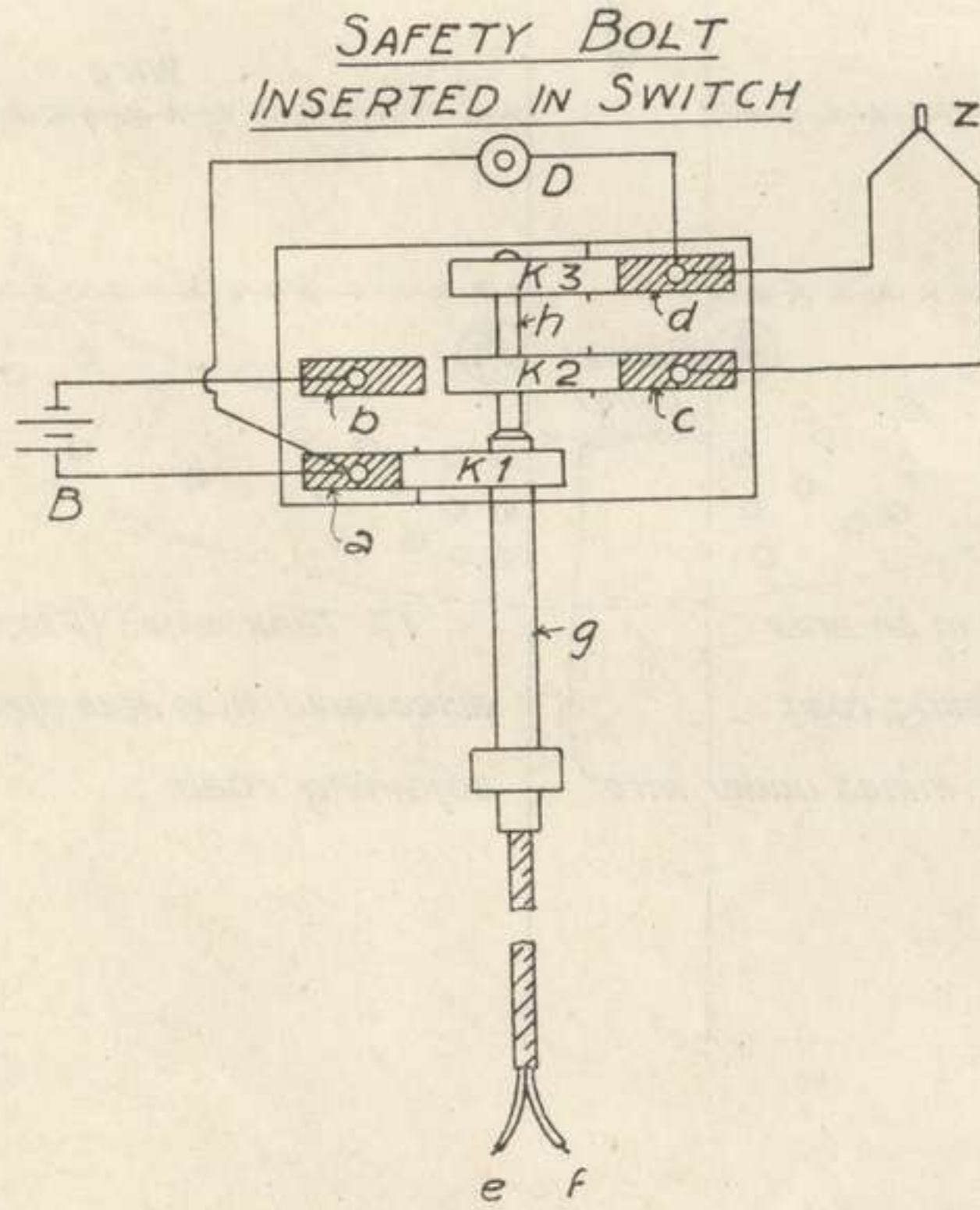


Fig. 4.



SAFETY BOLT

Fig. 3.

