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The Small Arms Instructor's Diagram Book

By

T/Lieut. J. T. BREARLEY, A.I.C.

and

T/W.O. (I) J. A. SHIMELD, A.I.C.

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ANGUS AND ROBERTSON LTD

SYDNEY & LONDON

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**SMALL ARMS INSTRUCTOR'S
DIAGRAM BOOK**

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transmission through the
post as a book*

INTRODUCTION

"AN eye-ful is better than an ear-ful." A complete book of diagrams is an essential part of a Small Arms Instructor's personal stores. This book presents all those illustrations which are required to be used as indicated by the "Instructor's Notes" in the various textbooks and training pamphlets.

Method of Teaching with the Aid of a Diagram

Example: S.A.T. Vol. 1, Pamphlet No 3. Rifle 1937

Lesson 6, par. 2. Rules of aiming.

- (a) The instructor explains the three rules of aiming.**
- (b) The explanation is then repeated, at the same time pointing at the particular part of the diagram which is being mentioned at the moment.**

- (c) The diagram is then passed around the squad for closer scrutiny, while the instructor interrogates the squad on the three rules.

Purpose of Blank Pages

Blank pages are provided throughout the book for the addition of such further diagrams as are required to be drawn on account of the introduction of new weapons or modifications of existing diagrams.

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42. Trigger mechanism—repetition and automatic

46. Correct aim

Lesson 9

Lesson 7

(also Pam. 14, App. II)

Lesson 11

Lesson 12

Lesson 12

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Pamphlet No. 4

Light Machine-gun

—Bren

Lesson 3

Lesson 10

Lesson 10

Pamphlet No. 4a

Light Machine-gun

—Lewis

Lesson 3

50. Correct aim
52. Correct aim—crossing tank
54. Correct aim—diagonally crossing
58. Direct attacker—correct aim
60. Crossing plane—appearance of tracer
64. Correct aim—
 (a) Gun sight
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 Lessons 2 and 3
 Lessons 2 and 3
- Pamphlet No. 6
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 Part I
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 Machine-gun
 —Vickers
- Lesson 29
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| 72. Lensatic sight— | |
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Diagram

*Small Arms Training
Vol. 1*

**Pamphlet No. 13
Grenade**

86. No. 36 High Explosive and igniter
set
88. Smoke grenade
92. Container "E" Type

Lesson 1

Lesson 6

**Manual of Protection
Against Gas and Air
Raids**

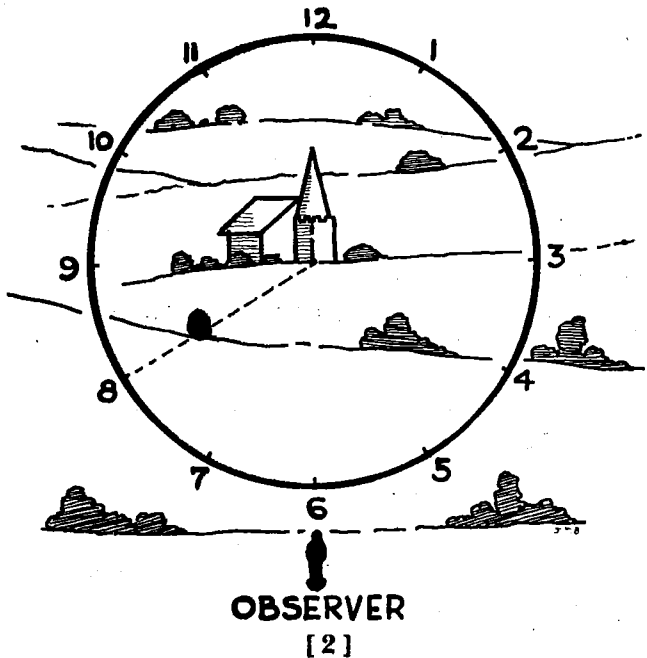
**Pamphlet No. 2 Part 1
Par. 8**

INDICATION—VERTICAL CLOCK RAY

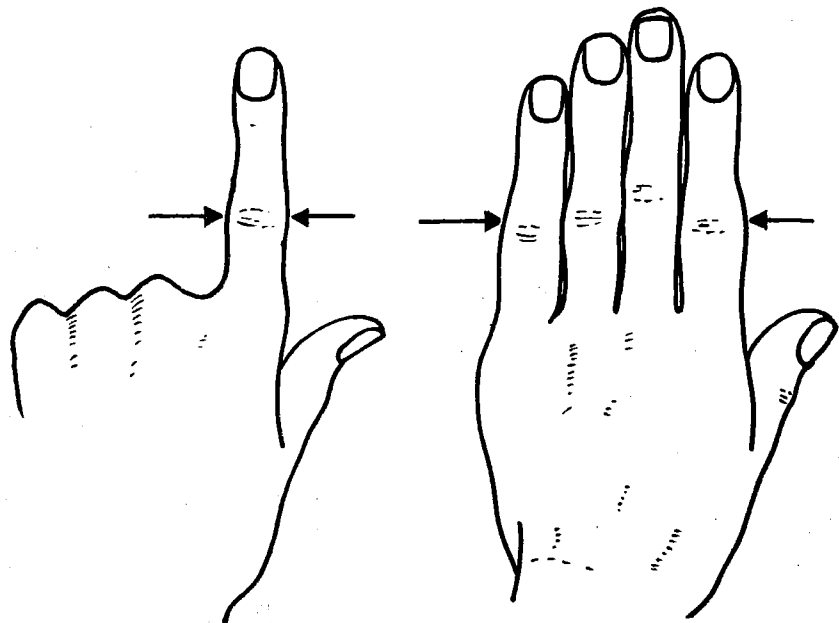
Example: Base of Tower

Left: 8 o'clock

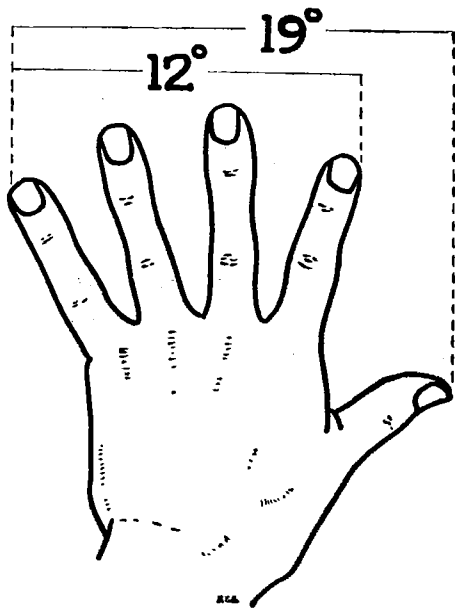
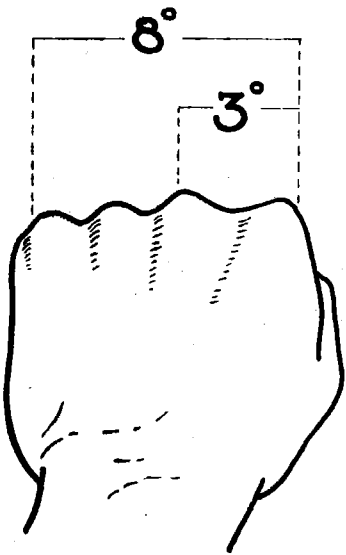
Small bush



INDICATION-FINGER METHOD



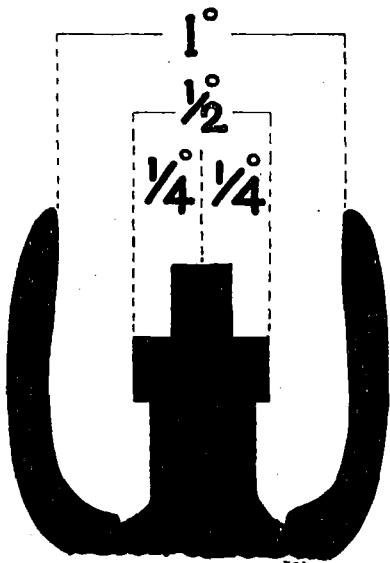
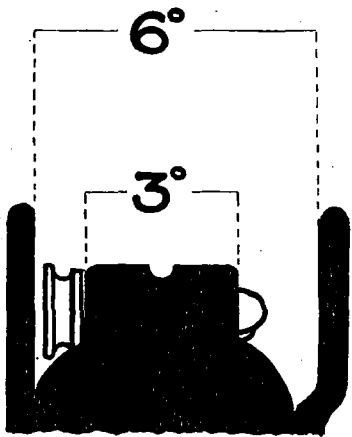
INDICATION-DEGREES-HAND



[6]

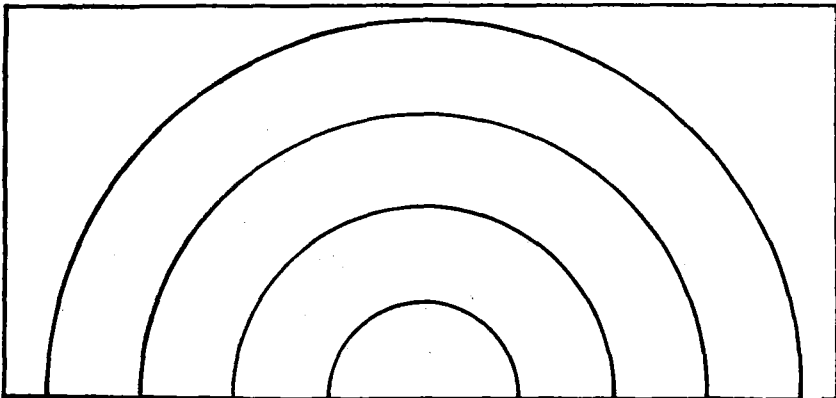
INDICATION-DEGREES-RIFLE

(Not to scale)



378

RANGE CARD



Point from which made out :-

Method of obtaining ranges :-

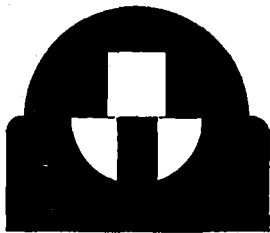
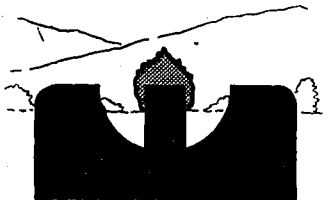
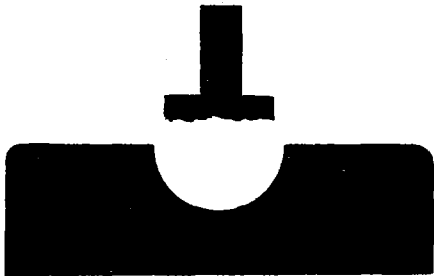
Made out by :-

Date :-

RIFLE—CORRECT AIM

(Not to scale)

[12]



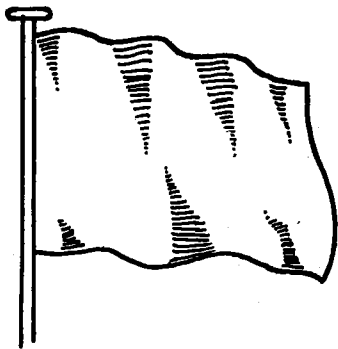
J.T.B.

SERVICE TARGET
(BUSH)

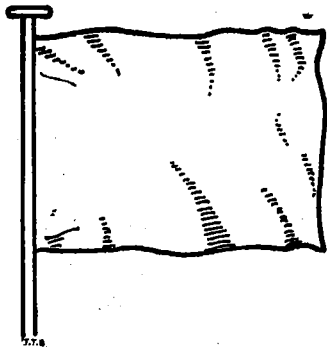
CLASSIFICATION
TARGET

(NOT TO SCALE)

STRENGTH OF WIND



FRESH 10-12 m.p.h.



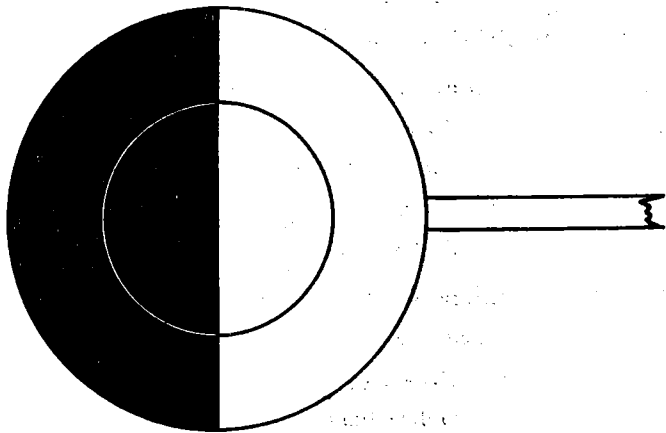
STRONG 15-20 m.p.h.

SIZES OF TARGET
LARGE SNAPSHOTING

Centre circle 12-inch diam.

Total diam. 22 inches

Colours—Black and ochre



[16]

SIZES OF TARGETS
4-FOOT CLASSIFICATION TARGET

Dimensions of scoring circles:

Bull 9-inch diameter

Inner 18 " "

Magpie 36 " "

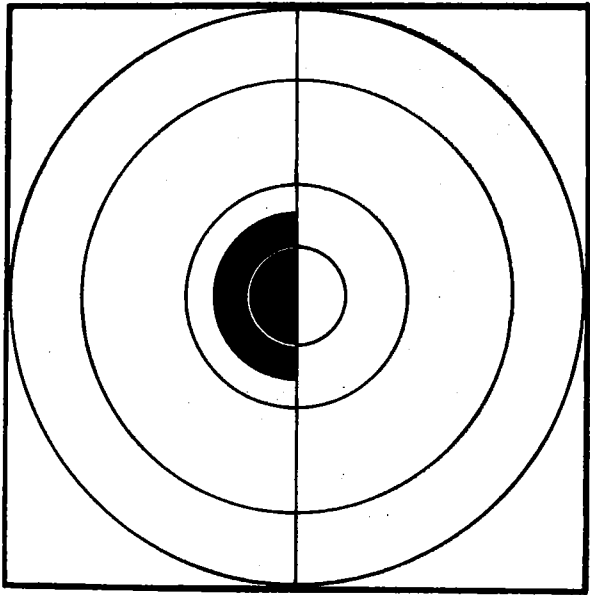
Outer 48 " "

Aiming mark 14 inches in diameter

Colours:

Grey above

Ochre below



SIZES OF TARGETS
6-FOOT CLASSIFICATION TARGET

Dimensions of scoring circles:

Bull 18-inch diameter

Inner 36 „ „

Magpie 48 „ „

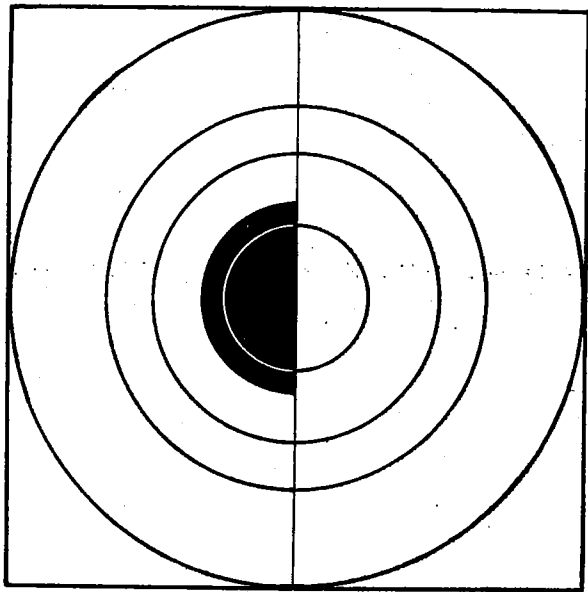
Outer 72 „ „

Aiming mark 24 inches in diameter

Colours:

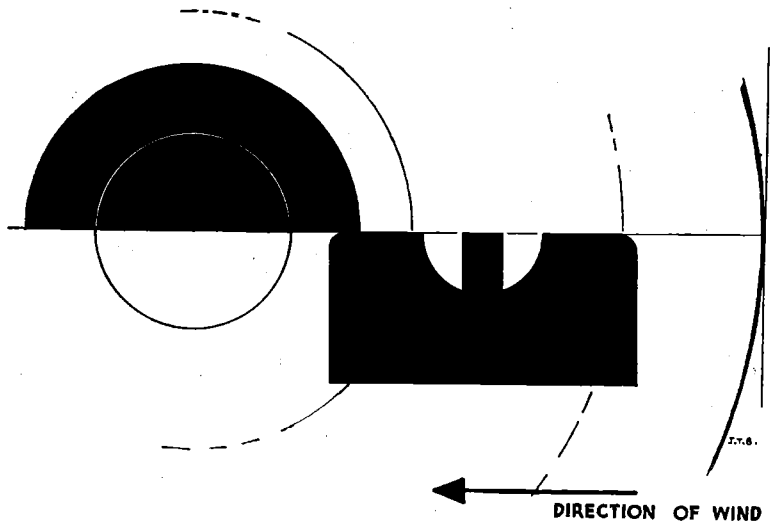
Grey above

Ochre below



[20]

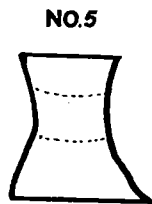
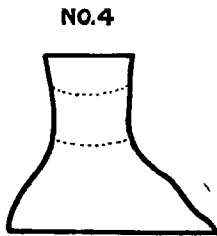
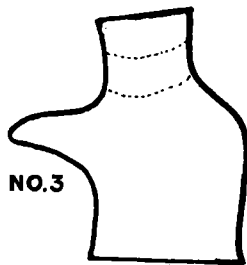
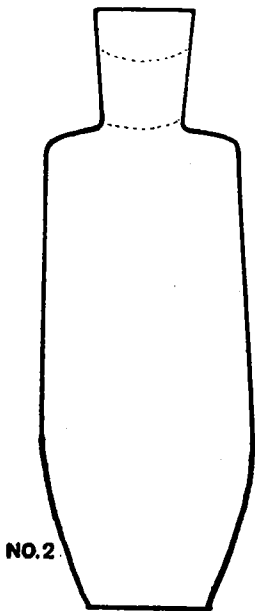
**AIMING OFF FOR WIND—MAINTAINING
ELEVATION**



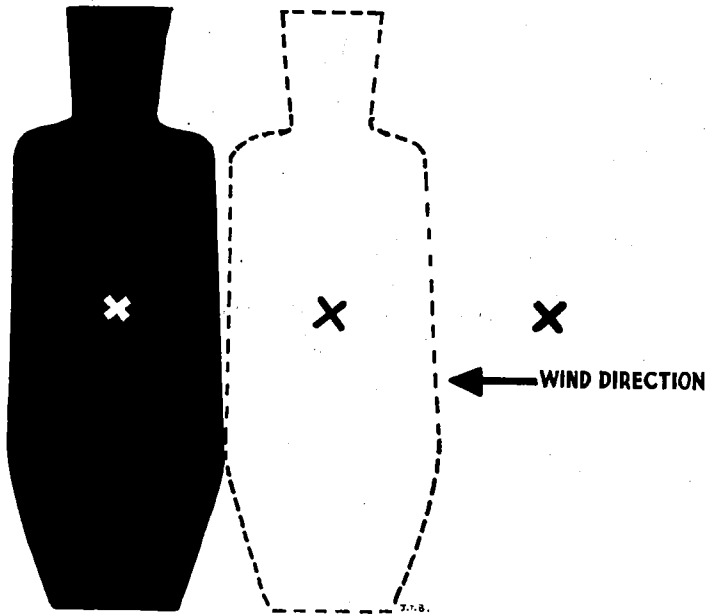
[22]

SILHOUETTE TARGETS

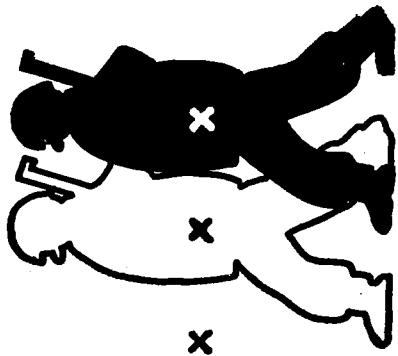
(Scale 1/20)



AIMING OFF FOR WIND-SERVICE TARGETS

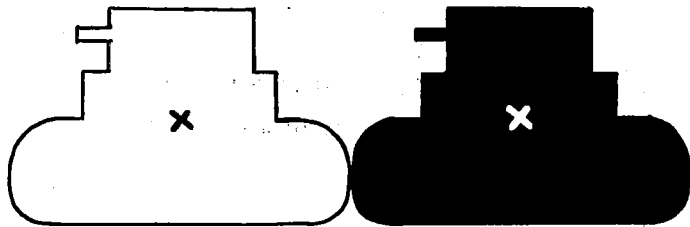


AIMING OFF FOR MOVEMENT
(Ground)

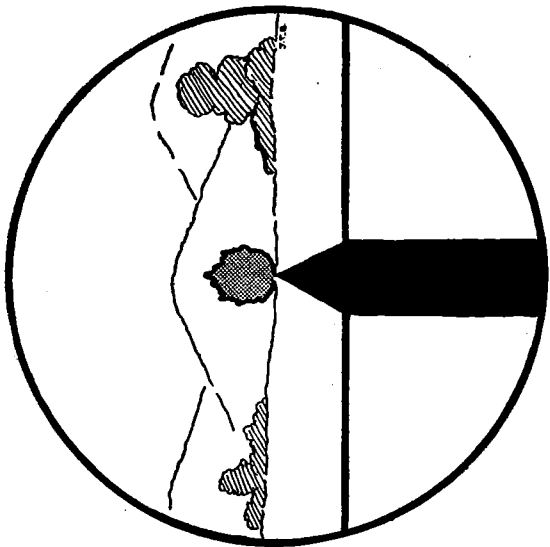


AIMING OFF FOR MOVEMENT—A.F.V.'s
(Ground)

← DIRECTION OF MOVEMENT



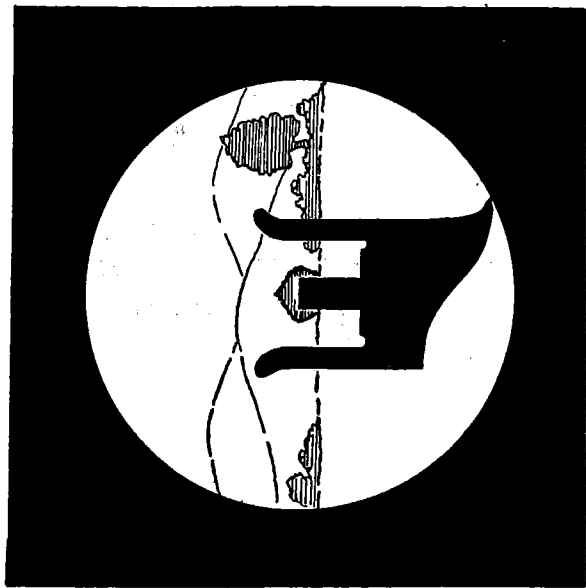
SNIPER RIFLE—CORRECT AIM
(Target—Lone Bush)



[32]

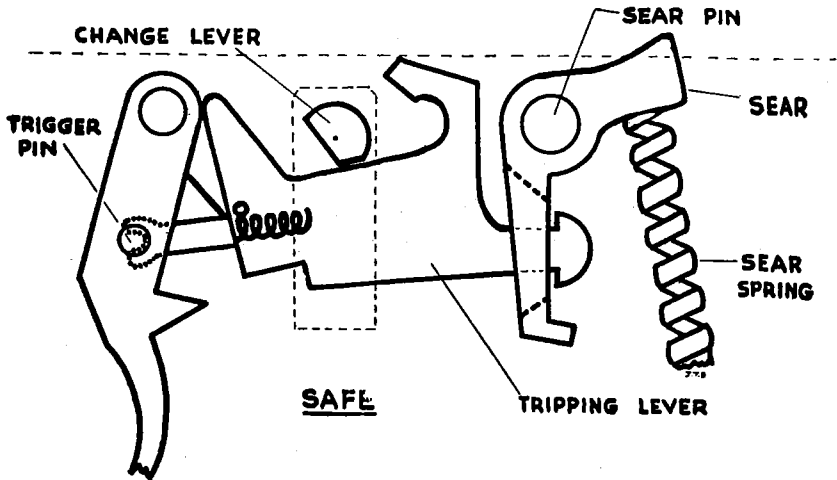
**LIGHT MACHINE-GUN—BREN
CORRECT AIM**

(Lone Bush)

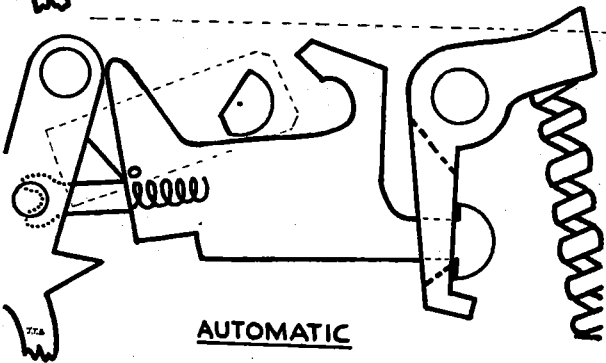
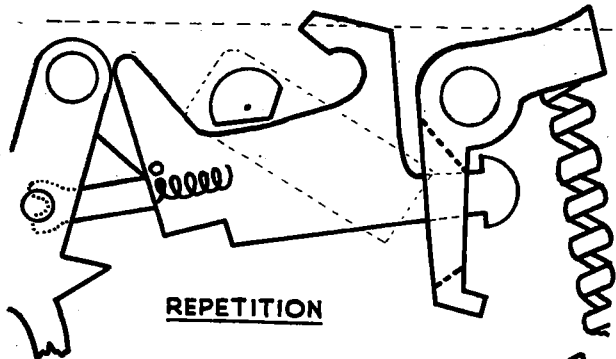


Z.T.B.

**LIGHT MACHINE-GUN-BREN
TRIGGER MECHANISM**



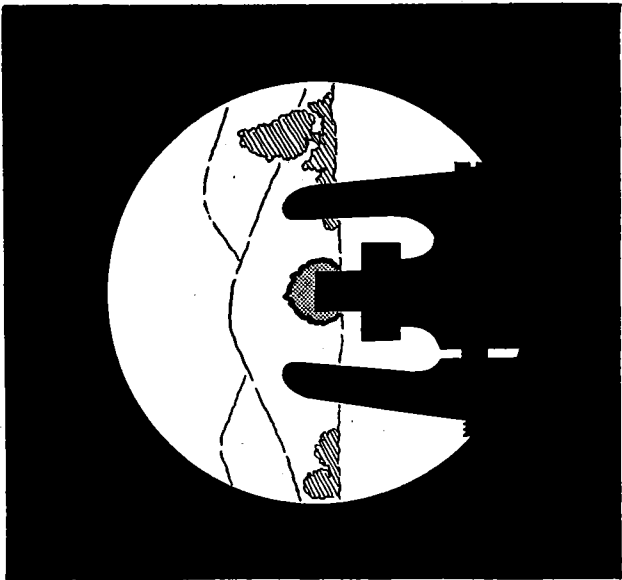
**LIGHT MACHINE-GUN-BREN
TRIGGER MECHANISM--(Continued)**



LIGHT MACHINE-GUN-LEWIS

CORRECT AIM

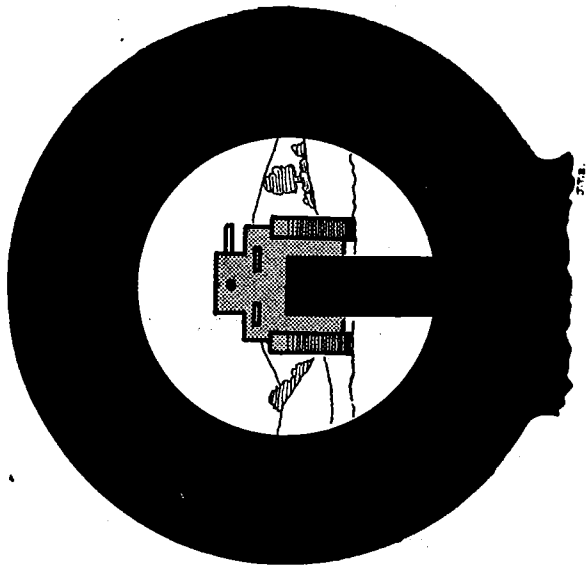
(Lone Bush) (Not to scale)



574

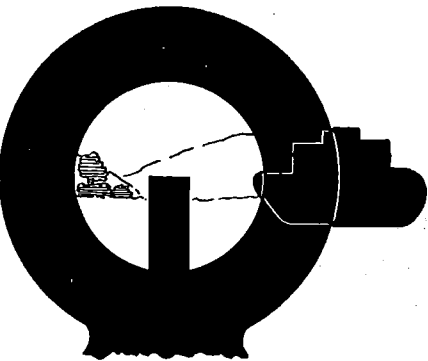
[46]

ANTI-TANK RIFLE
CORRECT AIM—STATIONARY OR HEAD-ON



[50]

ANTI-TANK RIFLE
CORRECT AIM-CROSSING TANK

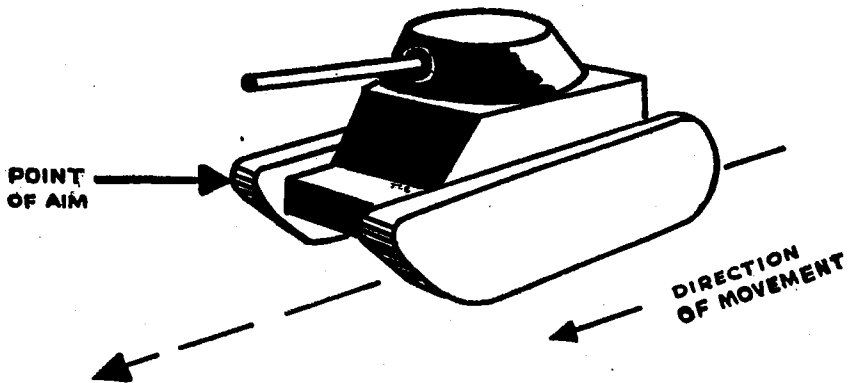


RANGE 300 YARDS
TANK 11 FT. LONG



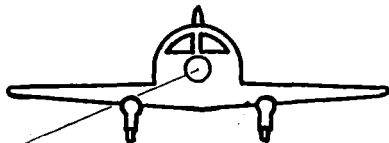
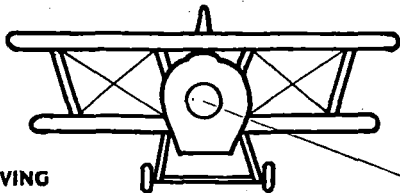
RANGE 500 YARDS
TANK 11 FT. LONG

ANTI-TANK RIFLE
CORRECT AIM—DIAGONALLY CROSSING

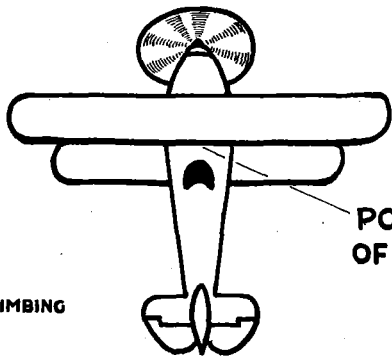


ANTI-AIRCRAFT-DIRECT ATTACKER

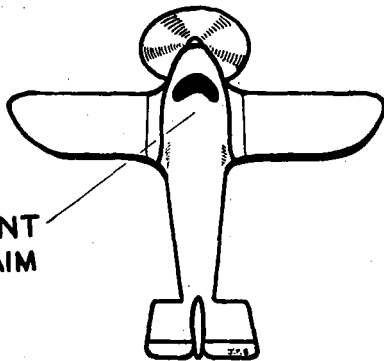
DIVING



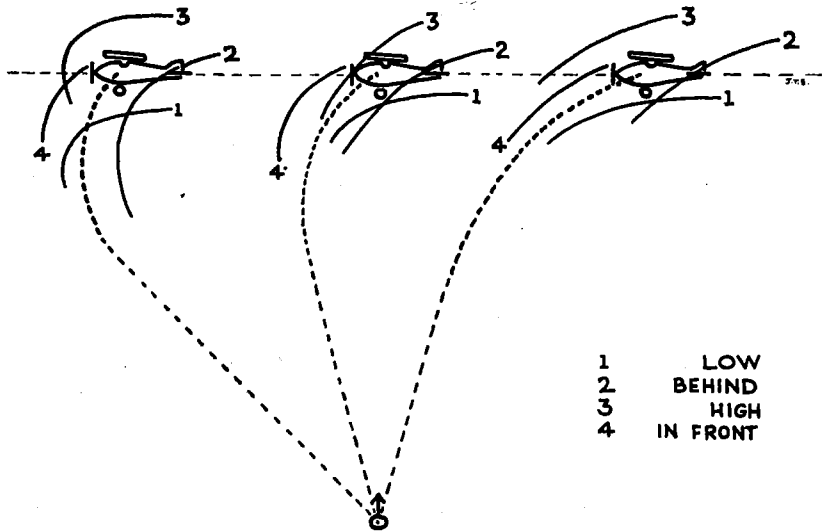
CLIMBING



**POINT
OF AIM**



ANTI-AIRCRAFT—APPEARANCE OF TRACER



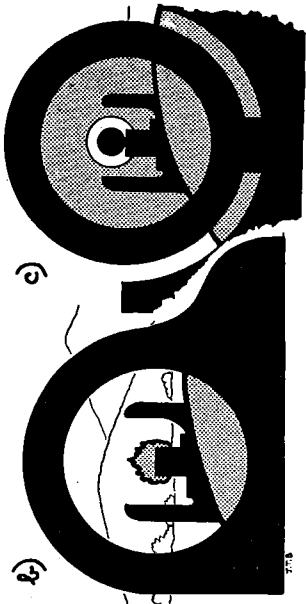
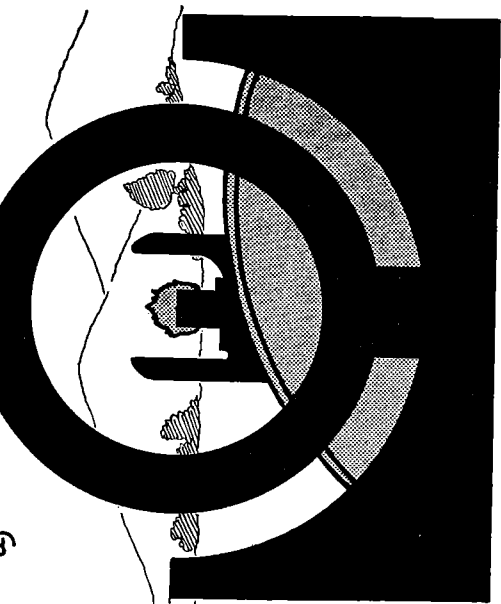
1 LOW
 2 BEHIND
 3 HIGH
 4 IN FRONT

[60]

MEDIUM MACHINE-GUN-VICKERS

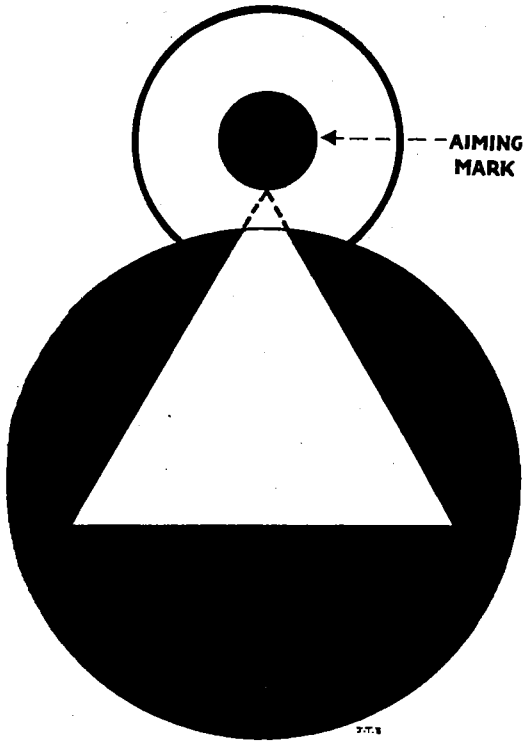
- (a) Correct aim—gun sight
- (b) Correct aim—battle sight
- (c) Correct aim at aiming lamp or peg

(Not to scale)

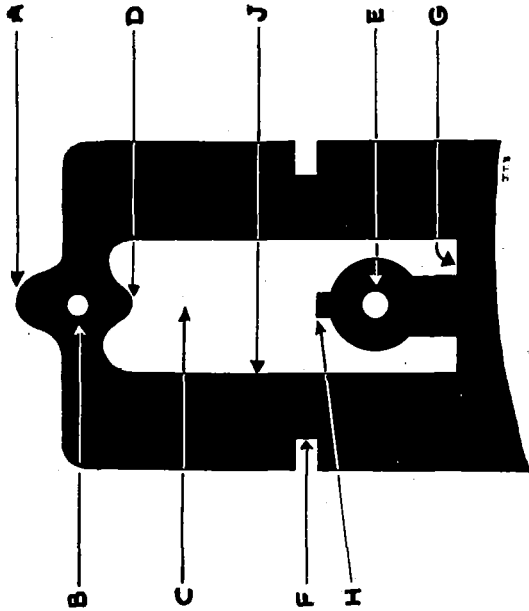


MEDIUM MACHINE-GUN-VICKERS
CORRECT AIM-DIAL SIGHT

[99]

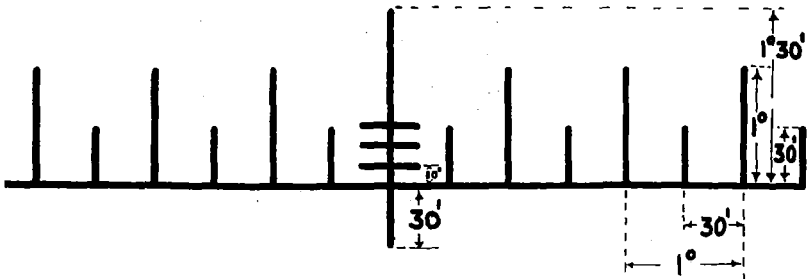


**MEDIUM MACHINE-GUN-VICKERS
NIGHT SIGHT**



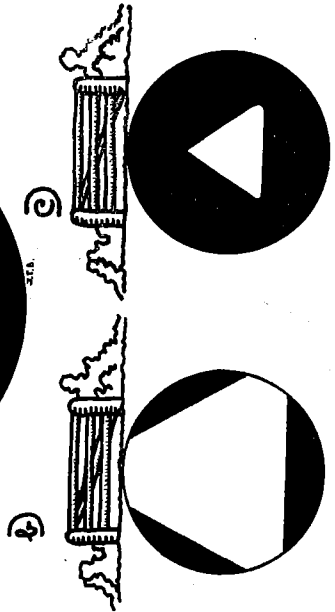
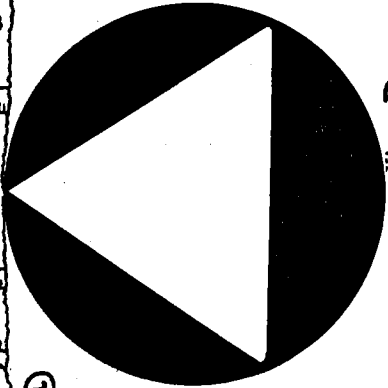
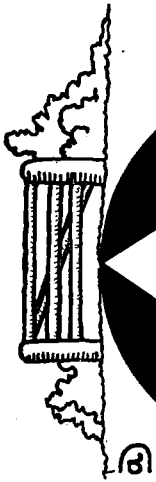
| | | | |
|-------------|-------|--------|------------|
| FROM H to E | gives | 30' | elevation |
| " " | " | 1° | " |
| " " | " | 1° | depression |
| " " | " | 1° 30' | " |
| " " | " | 2° | " |
| " " | " | 30' | traverse |
| " " | " | 1° | " |

GRATICULES—FIELD-GLASSES



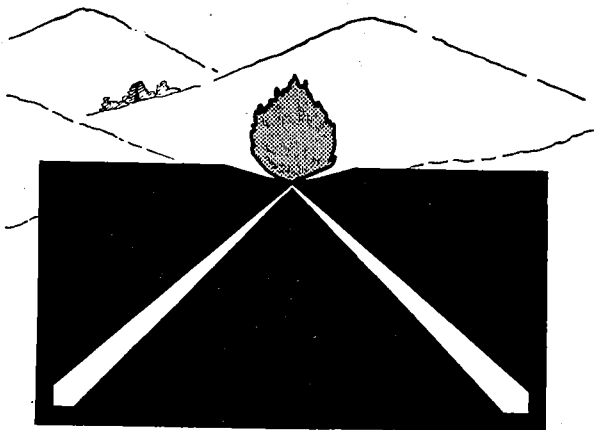
**MORTAR—2-INCH
LENSATIC SIGHT**

- (a) Correct aim**
- (b) Eye too near**
- (c) Eye too far away**



MORTAR-3-INCH
No. 1 COLLIMATOR-CORRECT AIM

[74]



OPEN
SIGHT

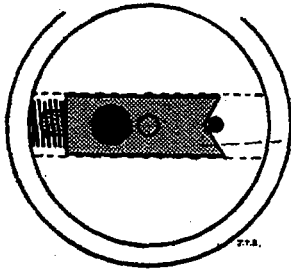
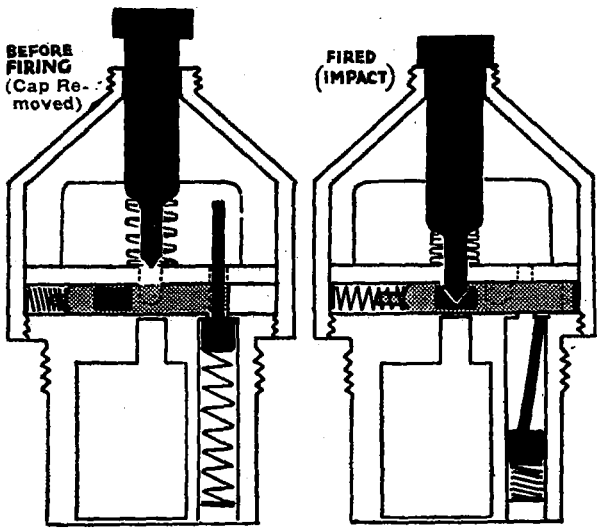


MORTAR-3-INCH
PRINCIPLE OF FUZE (No. 150)
(Diagrammatic-Not to scale)

**BEFORE
FIRING**
(Cap Re-
moved)

FIRE
(IMPACT)

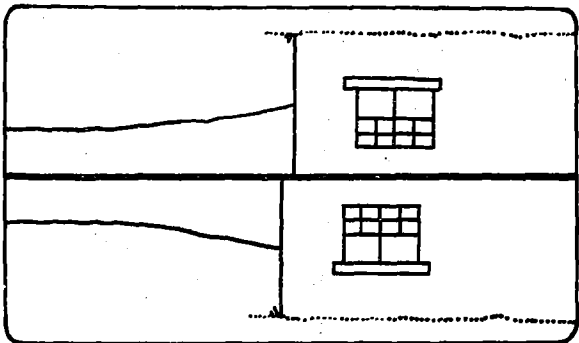
[94]



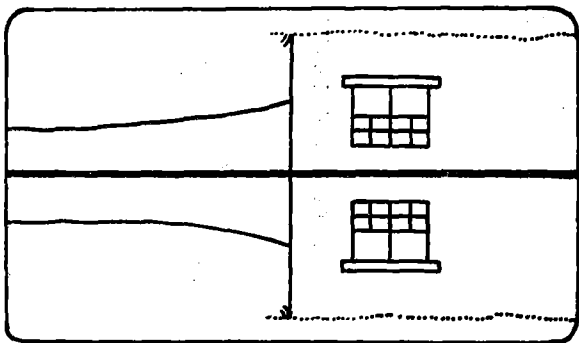
SHUTTER

773.

INFANTRY RANGEFINDER-COINCIDENCE



INCORRECT

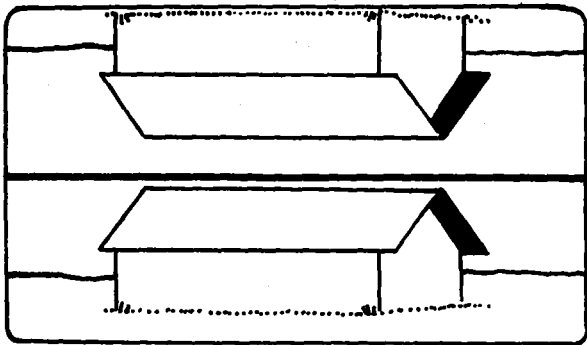


CORRECT

J.T.B.

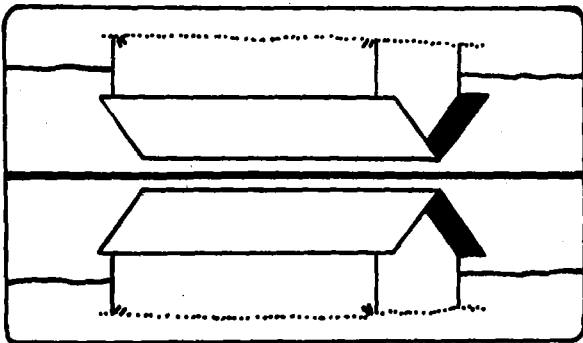
[80]

INFANTRY RANGEFINDER—HALVING



INCORRECT

[82]

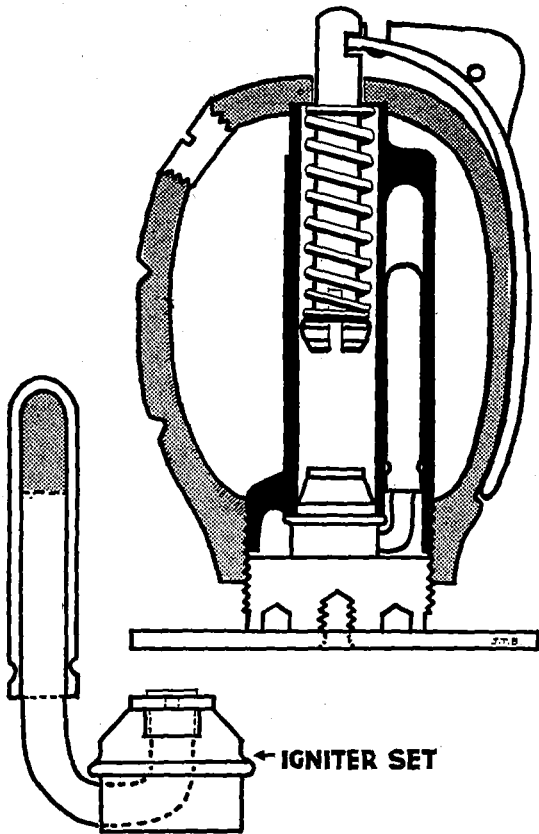


CORRECT

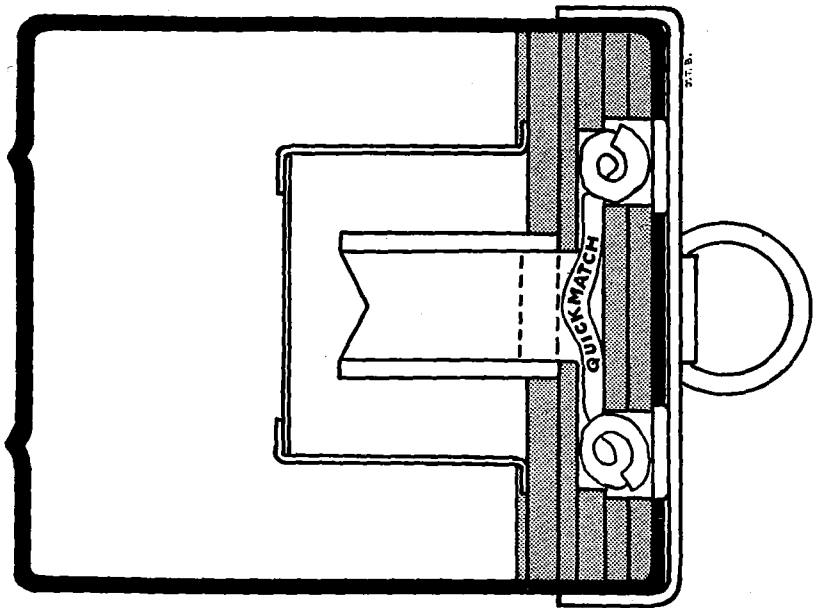
J.T.B.

GRENADE
No. 36—HIGH EXPLOSIVE

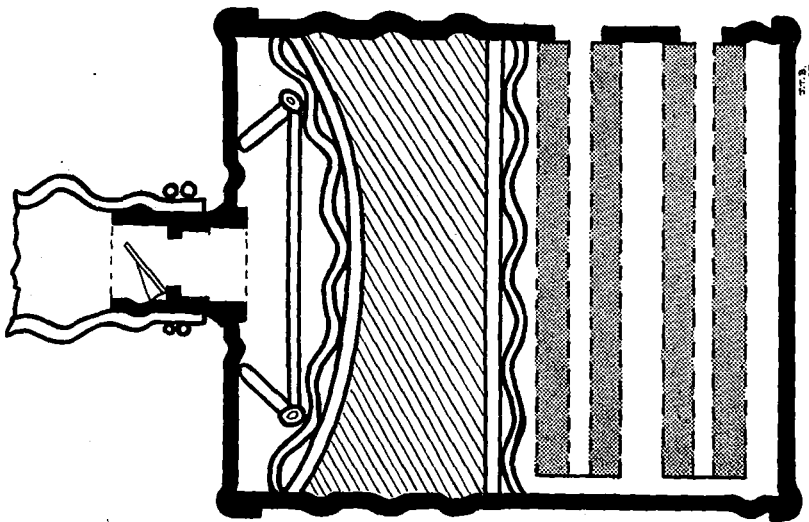
[98]



GRENADE
SMOKE-2.5"-.303" RIFLE



ANTI-GAS CONTAINER--TYPE "E"



**Halstead Press Pty Limited,
9-19 Nickson Street, Sydney**